

Panasonic®

HDTV Monitor

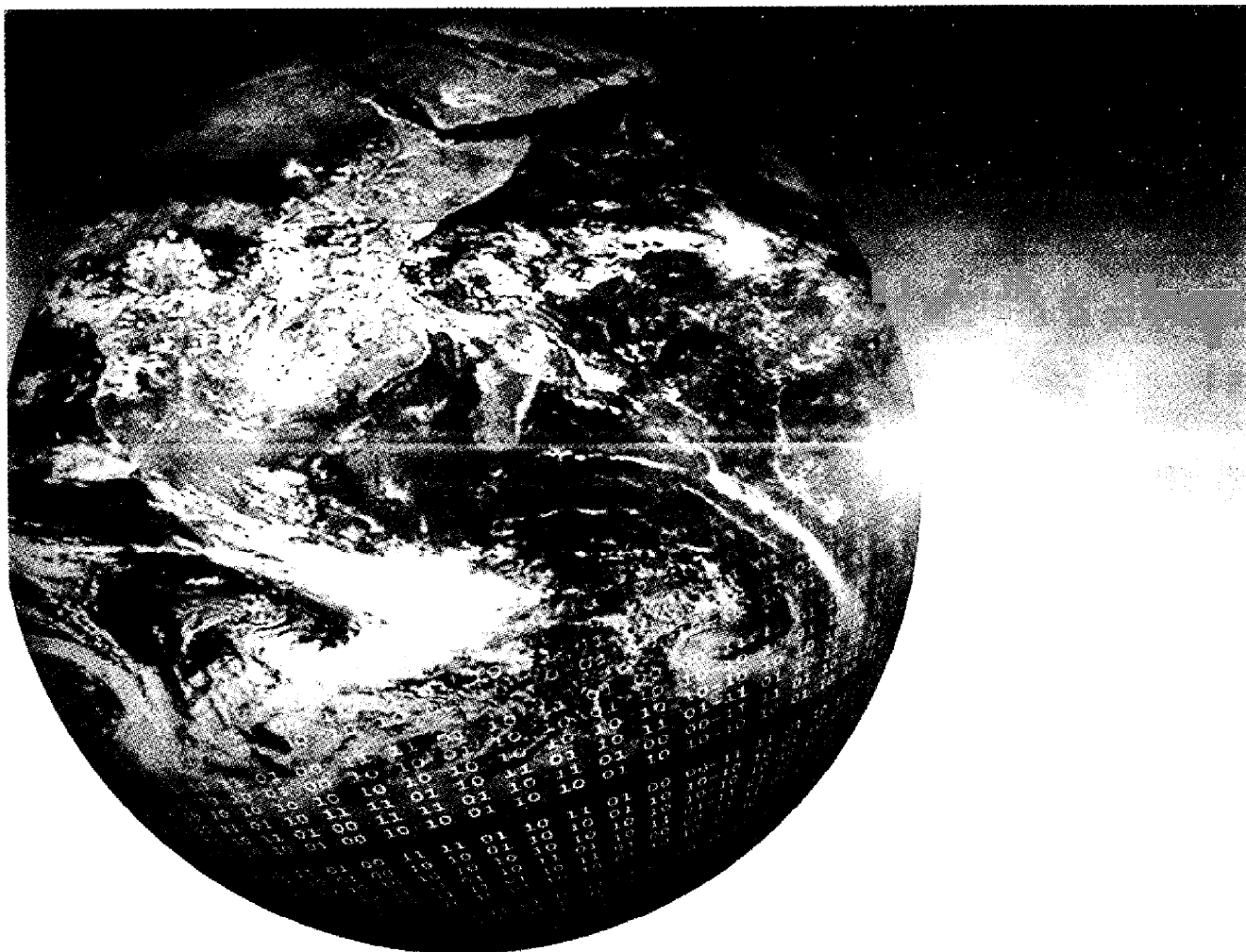
Operating Instructions

CT-32HL42

CT-32HX42

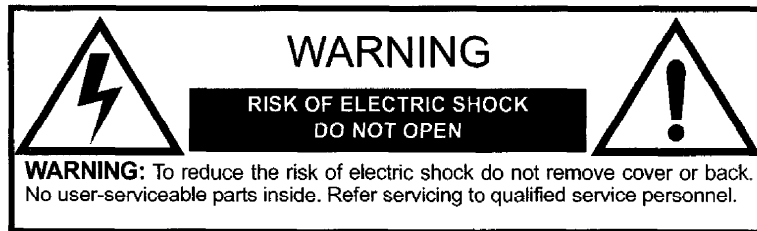
CT-36HL42

CT-36HX42



For assistance, please call: 1-800-211-PANA (7262) or
send e-mail to: consumerproducts@panasonic.com (USA only)

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The lightning flash with arrow head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.



The double insulation symbol (a square within a square) is intended to alert qualified service personnel to use only identical replacement parts in this apparatus.

FCC CAUTION: ANY CHANGES OR MODIFICATIONS TO THIS TV RECEIVER NOT EXPRESSLY APPROVED BY MATSUSHITA ELECTRIC CORPORATION OF AMERICA COULD CAUSE HARMFUL INTERFERENCE, WHICH WOULD VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT.

ENVIRONMENTAL NOTICE: THIS PRODUCT UTILIZES CATHODE RAY TUBES (CRT) AND OTHER COMPONENTS THAT CONTAIN LEAD. DISPOSAL OF THESE MATERIALS MAY BE REGULATED IN YOUR COMMUNITY DUE TO ENVIRONMENTAL CONSIDERATIONS. FOR DISPOSAL OR RECYCLING INFORMATION PLEASE CONTACT YOUR LOCAL AUTHORITIES, OR THE ELECTRONICS INDUSTRIES ALLIANCE: <[HTTP://WWW.EIAE.ORG](http://www.eiae.org)>

This product incorporates U.S. Patent 6,266,098 B1; Issue date: July 24, 2001; assigned to Matsushita Electric Corporation of America; other U.S. and foreign patents pending.

BBE
High Definition Sound

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**Read these instructions completely before operating television.
Contents are subject to change without notice or obligation.**

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Table of Contents

Congratulations	2
Customer Record	2
Care and Cleaning	2
Specifications	2
Installation	3
Television Location	3
Optional Cable Connections	3
AC Power Supply Cord	3
Cable / Antenna Connection	3
Feature Chart	4
Auto Set Up Menu	5
Optional Equipment Connections	6
VCR	6
Cable Box	7
VCR and Cable Box	7
Amplifier (TO AUDIO AMP)	8
Front Control Panel	9
Program Out (PROG OUT)	10
Digital TV - Set-Top Box (DTV-STB) or DVD Players	10
PIP and Split Operation	11
Special Remote Buttons	13
Remote Control Operation	
(models CT-32HL42 and CT-36HL42)	14
Mode Operational Key Chart	15
Programming the Remote	17
Programming Without a Code	17
Component Codes	18
Remote Control Operation	
(models CT-32HX42 and CT-36HX42)	22
Mode Operational Key Chart	23
Programming the Remote	25
Programming Without a Code	25
Component Codes	26
Roller Guide Menu™ Navigation	28
Roller Guide Icons	30
Roller Guide Icon Menus	30
Rollerguide Icon Menu Operation	31
Set Up	31
Timer	34
Picture	35
Channels	37
Audio	39
Lock	40
V-Chip Menu Operation	41
Troubleshooting Chart	47
Limited Warranty	48
Customer Services Directory	50
Index	51

CONGRATULATIONS

Congratulations

Your new television features state-of-the-art technology for high quality picture and sound with complete audio/video connections for your home theater system. Your TV is designed to give you many years of enjoyment. It was thoroughly tested and tuned at the factory for best performance.

Customer Record

The model and serial number of this product are located on the back of the TV. You should note the model and serial number in the space provided and retain as a permanent record of your purchase. This will aid in identification in the event of theft or loss. Product registration for U.S. customers is available at: www.prodreg.com/panasonic.

Model
Number

Serial
Number

Care and Cleaning

Screen (Turn TV Off)

- Use a mild soap solution or window cleaner with a soft clean cloth. DO NOT USE ABRASIVE CLEANERS.
- Avoid excessive moisture and wipe dry.

Note: Do not spray any type of cleaning fluid directly on the screen.

Cabinet and Remote Control

- ☐ For cabinets and remote control, use a soft cloth dampened with water or a mild detergent solution. Avoid excessive moisture and wipe dry.
- ☐ Do not use benzene, thinner or other petroleum based products.

Specifications

Power Source	CT-32HL42 (3.6A) CT-32HL42U (3.6A) CT-32HX42 (3.6A) CT-32HX42U (3.6A) CT-36HL42 (3.6A) CT-36HL42U (3.6A) CT-36HX42 (3.6A) CT-36HX42U (3.6A)	120V AC, 60Hz
Channel Capability - 181	VHF-12; UHF-56; Cable-113	
Video Input Jacks	1Vp-p, 75 Ohm, Phono Jack Type	
Audio Input Jacks	500mV RMS 47K Ohm	
Video Output Jack	1Vp-p, 75 Ohm, Phono Jack Type	
Audio Output Jacks	0-2.0V RMS 4.7K Ohm	
Component Input (Y / P_B / P_R)	75 Ohm, Phono Jack Type	
S-Video Input Jacks	S-Video (Y-C) Connector	

Specifications are subject to change without notice or obligation

Installation

Television Location

This unit is intended to be used with an optional stand or entertainment center. Consult your dealer for available options.

- ☐ Avoid excessive sunlight or bright lights, including reflections.
- ☐ Keep away from excessive heat or moisture. Inadequate ventilation may cause internal component failure.
- ☐ Fluorescent lighting may reduce remote control transmitting range.
- ☐ Keep away from magnetic equipment, including motors, fans and external speakers.

CAUTION: Use this television receiver only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. In order to avoid injury to children, never place your television receiver on a piece of furniture that is capable of being tilted by a child leaning on it, pulling on it, standing on it, or climbing on it.



CT-32HL42, CT-32HL42U :

CAUTION: These television receivers for use only with PANASONIC TY-32HL42P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-32HX42, CT-32HX42U:

CAUTION: These television receivers for use only with PANASONIC TY-32HX40P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-36HL42, CT-36HL42U :

CAUTION: These television receivers for use only with PANASONIC TY-36HL42P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

CT-36HX42, CT-36HX42U:

CAUTION: These television receivers for use only with PANASONIC TY-36HX40P stand. Use with other carts (or stands) is capable of resulting in instability causing possible injury.

Optional Cable Connections

Shielded audio and video cables should be used between components. For best results:

- ☐ Use 75-ohm coaxial shielded cables.
- ☐ Use appropriate input and output connectors, that match your component connectors.
- ☐ Avoid long cables to minimize interference.

AC Power Supply Cord

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT OF AC OUTLET AND FULLY INSERT. DO NOT USE A PLUG WITH A RECEPTACLE OR OTHER OUTLET UNLESS THE BLADE CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.



Polarized plug

PROTECT POWER CORDS FROM BEING WALKED ON, ROLLED OVER, CRIMPED, BENT, OR PINCHED, PARTICULARLY AT PLUGS, CONVENIENCE RECEPTACLES, AND THE POINT WHERE THEY EXIT FROM THE APPARATUS.

Cable / Antenna Connection

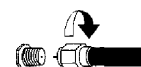
For proper reception, either a cable or antenna connection is required.

Cable Connection

Connect the cable supplied by your local cable company to ANT1 connection on back of television. Select cable mode and ANT1 in SET UP menu under Prog Chan (Program Channels).

Note: A cable converter box may be required for proper reception. Check with your local cable company for compatibility requirements.

Incoming Cable from
Cable Company

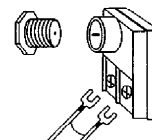


75 Ohm VHF/UHF
on back of TV

Antenna Connections

- For proper reception of VHF/UHF channels, an external antenna is required. For best reception an outdoor antenna is recommended.
- Connect home antenna to ANT1 connection on back of television. Select TV mode and ANT1 in the SET UP menu under Prog Chan.

Incoming Cable from
Home Antenna



Cable Preset

Cable Mode is preset at the factory.
Antenna users must change to TV Mode and
ANT 1 in the Set Up menu.

Feature Chart

MODELS		CT-32HL42	CT-32HX42	CT-36HL42	CT-36HX42
FEATURES					
SPECIAL FEATURES	MENU LANGUAGE ENG/SPAN/FR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2 TUNER SPLIT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2 TUNER PIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VIDEO PICTURE MEMORY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	VIDEO INPUT SKIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	CLOSED CAPTIONING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	V-CHIP CAPABILITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIGITAL SCAN RATE	1080i, 480p	1080i, 480p	1080i, 480p	1080i, 480p
	NTSC LINE - DOUBLER	480p	480p	480p	480p
	VIDEO NORM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AUDIO	AUDIO NORM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	STEREO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	AI SOUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	BASS/BALANCE/TREBLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SURROUND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	BBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SUBWOOFER	<input type="checkbox"/>		<input type="checkbox"/>	
A/V JACKS	A/V PROGRAM OUT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	A/V IN (REAR/FRONT)	4 (3/1)	4 (3/1)	4 (3/1)	4 (3/1)
	AUDIO OUT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	S-VHS INPUT (REAR/FRONT)	2/1	2/1	2/1	2/1
	COMPONENT INPUT	2	2	2	2

IMPORTANT INFORMATION REGARDING THE USE OF VIDEO GAMES, COMPUTERS, OR OTHER FIXED IMAGE DISPLAYS.

WARNING: The marking or retained image on the picture tube resulting from viewing fixed image is not an operating defect and as such is not covered by Warranty.

This television is designed to display constantly moving images on the screen. Continuous viewing of stationary images such as letterbox pictures on standard screen TVs (with top/bottom bars), non-expanded standard (4:3) pictures on wide screen TVs (with side bars shown on each side of an image), stock market report bars (ticker running at the bottom of the screen), video game patterns, fixed scoreboards, bright station logos, on-line (internet) or repetitive computer style patterns should be limited.

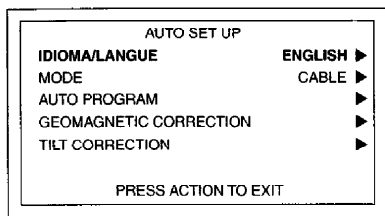
The extended use of fixed image program material can cause a permanent picture tube damage, shown as a "shadow image" viewable on normal programs. This type of irreversible picture tube deterioration can be limited by performing the following steps:

- Do not display the fixed image for extended periods of time.
- Turn the power off when not in use.

Auto Set Up Menu

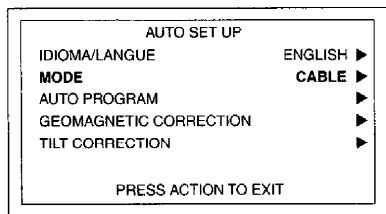
For your convenience, Auto Set up menu will be displayed on screen when the set is turned on for the first time. If needed, follow the menus and procedures for setting up the features.

- ☐ **IDIOMA/LANGUE** - To change menu language to ENGLISH, SPANISH or FRENCH.



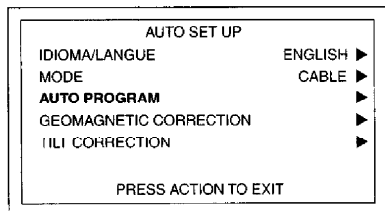
- ☐ Press **VOL ►** to select English, Spanish or French.

- ☐ **MODE** - To select TV (antenna) or CABLE mode depending on the signal source.



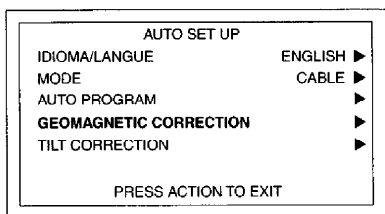
- ☐ Press **VOL ►** to select TV or CABLE.

- ☐ **AUTO PROGRAM** - To automatically program all channels with a signal.

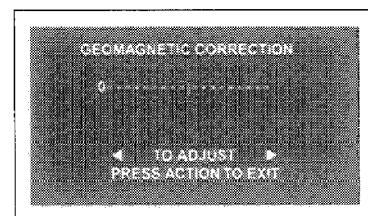


- ☐ Press **VOL ►** to start Auto Programming.

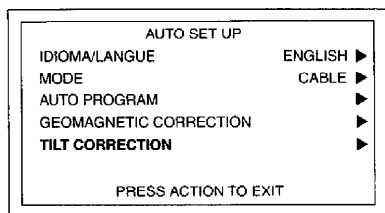
- ☐ **GEOMAGNETIC CORRECTION** - This feature is used to adjust discoloration of the picture due to earth's magnetic field in the area.



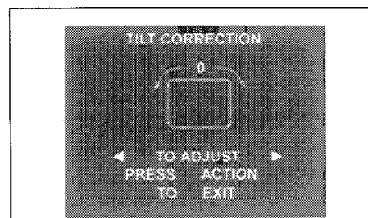
- ☐ Press **VOL ►** to display adjustment menu.
- ☐ Press **◀ VOL** or **VOL ►** to adjust discoloration in picture.



- ☐ **TILT CORRECTION** - This feature is used to adjust the tilt of the picture due to earth's magnetic field in the area.



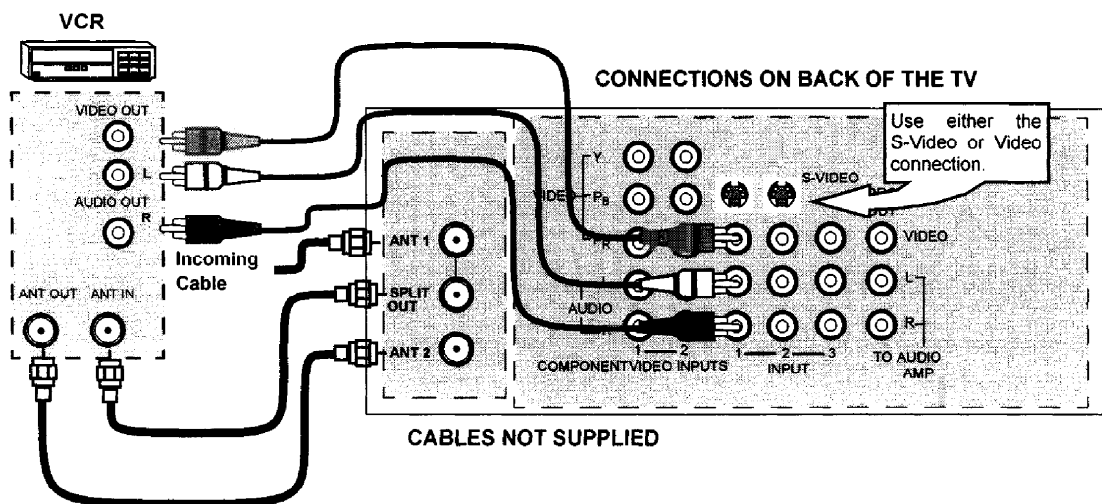
- ☐ Press **VOL ►** to display adjustment menu.
- ☐ Press **◀ VOL** or **VOL ►** to adjust picture tilt.



Optional Equipment Connections

VCR Connection

Follow this diagram when connecting your television to a VCR only.



Note: The remote control must be programmed with supplied codes to operate the VCR.

Viewing a television program

Procedure

1. Select ANT1 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to the television program you want to view.

Viewing a video

Procedure

☐ Option A

1. Select ANT1 in the SET UP menu under Prog Chan.
2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2 & COMP1, COMP2, etc.) connected to your VCR.
3. Begin the video.

☐ Option B

1. Select ANT2 in the SET UP menu under Prog Chan.
2. Tune the television to Channel 3 or 4, depending on your VCR.
3. Begin the video.

Recording a television program

Procedure

☐ Option A (Recording and viewing the same program)

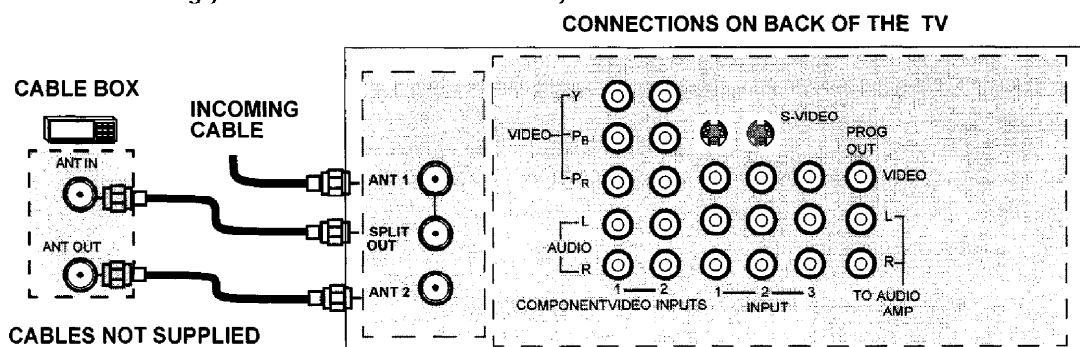
1. Select ANT2 in the SET UP menu under Prog Chan.
2. Tune the television to Channel 3 or 4, depending on your VCR.
3. Using the VCR, tune to the television program you want to record.
4. Begin recording.

☐ Option B (Recording one program while viewing another program)

1. Select ANT1 in the SET UP menu under Prog Chan.
2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
3. Using the VCR, tune to the television program you want to record.
4. Begin recording.
5. Press the **TV/VIDEO** button on the remote control to switch back to TV mode.
6. Tune the television to the television program you want to view.

Cable Box Connection

Follow this diagram when connecting your television to a cable box only.



Note: The remote control must be programmed with supplied codes to operate the cable box.

Viewing a premium (scrambled) cable channel

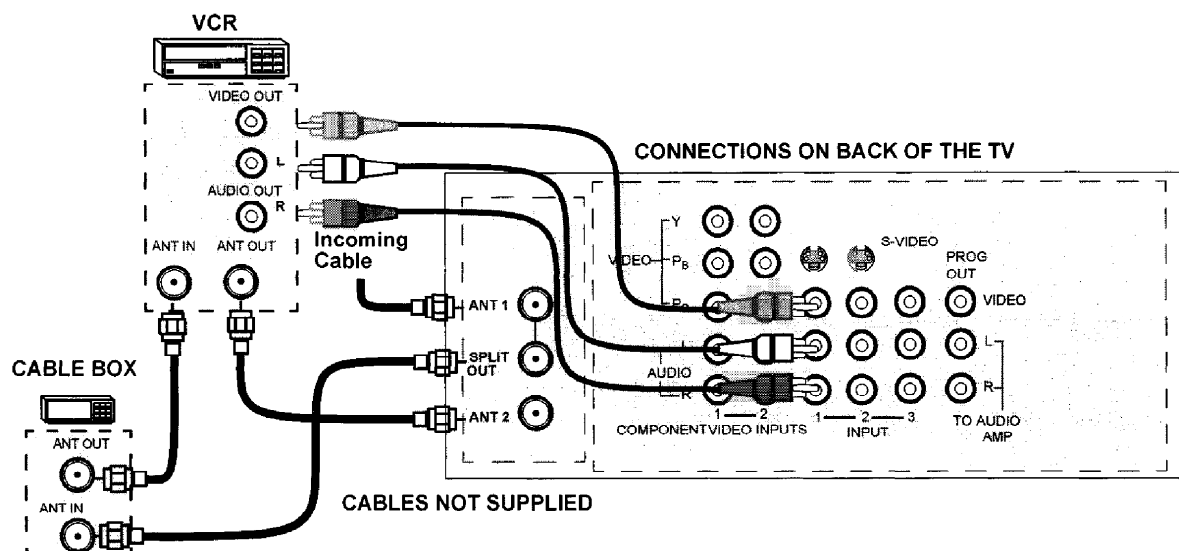
Procedure

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3.
3. Using the cable box, tune to the premium cable channel you want to view.

Note: To use special features such as Favorite Channels and Channel Captions ANT1 must be selected in the SET UP menu under Prog Chan.

VCR and Cable Box Connection

Follow this diagram when connecting your television to both a VCR and a cable box.



Note: The remote control must be programmed with supplied codes to operate the VCR and cable box.

Viewing a premium (scrambled) cable channel

Procedure

1. Select ANT2 in the SET UP menu under Prog Chan (Program Channels).
2. Tune the television to Channel 3.
3. Using the cable box, tune to the premium cable channel you want to view.

Note: To use special features such as Favorite Channels and Channel Captions ANT1 must be selected in the SET UP menu under Prog Chan.

OPTIONAL EQUIPMENT CONNECTIONS

VCR and Cable Box Connection (Contd.)

Recording a premium (scrambled) cable channel

Procedure

1. Select ANT2 in the SET UP menu under Prog Chan.
2. Press the **TV/VIDEO** button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
3. Turn the VCR ON.
4. Tune the VCR to Channel 3 or 4, depending on the switch setting on the back of VCR.
5. Using your cable box, tune to the premium cable channel you want to record.
6. Begin recording.

Note: To view a different channel while recording:

- Select ANT1 in the SET UP menu under Prog Chan.
- Press the **TV/VIDEO** button on the remote control to TV mode.
- Tune the television to a television program (except another premium cable channel).

Amplifier Connection (TO AUDIO AMP)

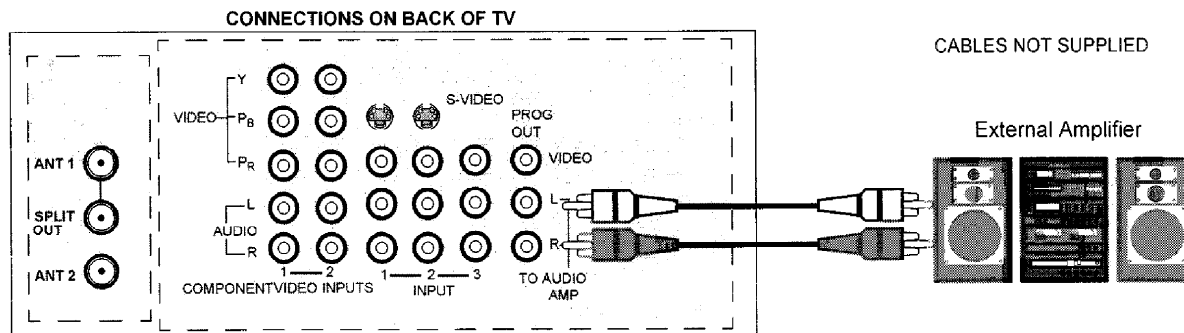
To listen through a separate stereo system, connect an external audio amplifier TO AUDIO AMP outputs on back of television.

Note: TO AUDIO AMP terminals can not be connected directly to external speakers.

Audio Adjustments

1. Select SPEAKERS ON located in the onscreen AUDIO menu.
2. Set amplifier volume to minimum.
3. Adjust television volume to desired level.
4. Adjust amplifier volume to match the television.
5. Select SPEAKERS OFF & VARIABLE AUDIO OUT from AUDIO menu.
6. Volume, mute, bass, treble and balance are now controlled through the television.

Note: Select **SPEAKERS OFF & FIXED AUDIO OUT** to control audio functions through the external amplifier.

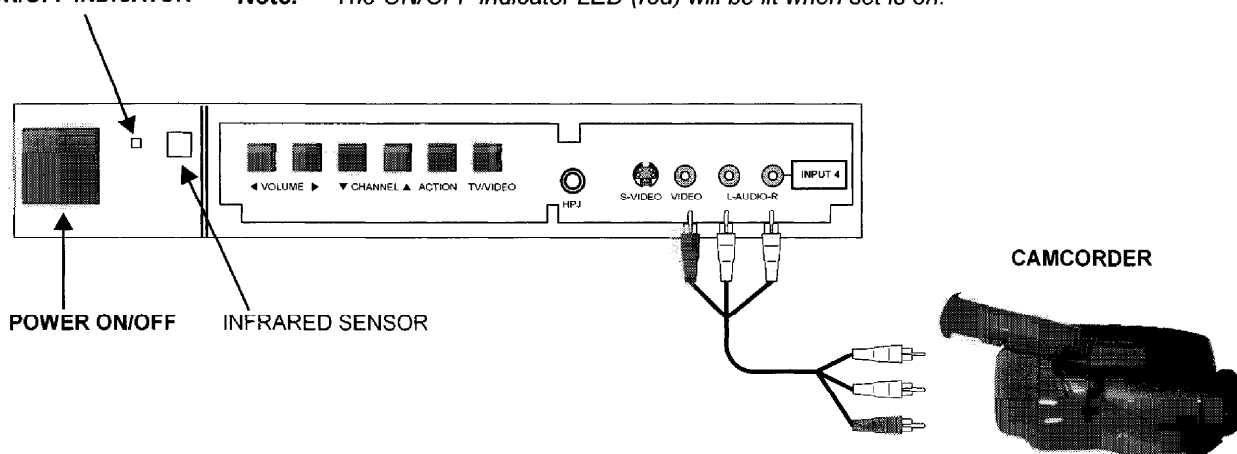


Front Control Panel (models CT-32HX42 and CT-36HX42)

The front control panel can be used to access menus and switch video mode when the remote control is not available.

ON/OFF INDICATOR

Note: The ON/OFF indicator LED (red) will be lit when set is on.



Note: The S-VIDEO connection provides higher quality picture. It overrides VIDEO 4 connections. Use INPUT 4, AUDIO L and R with S-VIDEO connection.

Open the door on the TV front panel to use the connections for your optional equipments (Camcorder, VCR or other video components). Select INPUT 4 mode by pressing TV/VIDEO button.

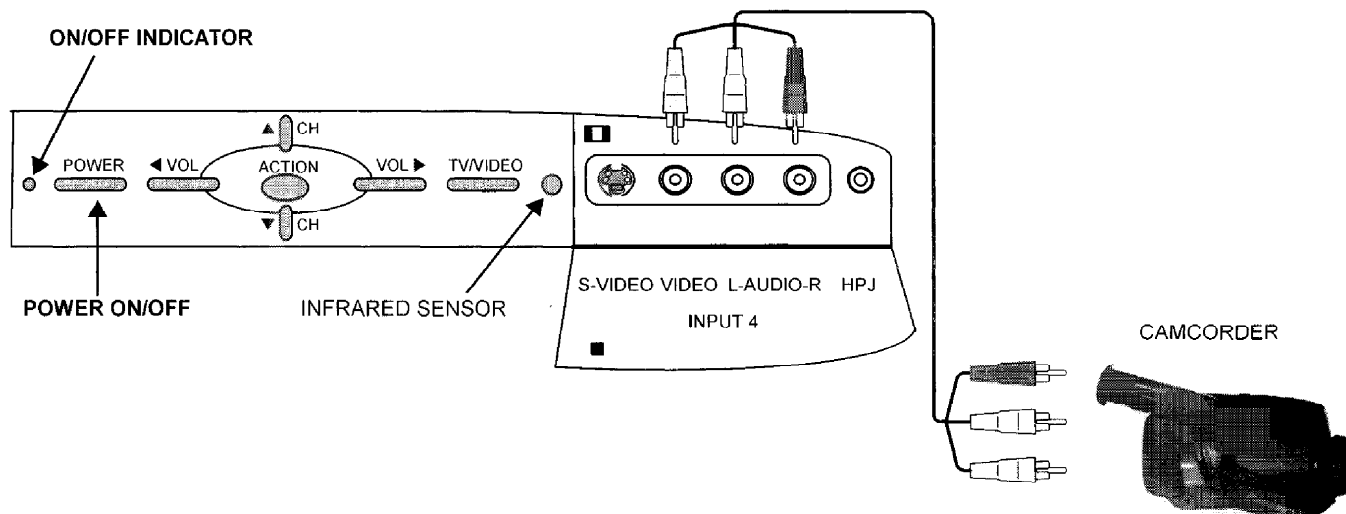
Procedure

1. Connect equipment to front Audio/Video input jacks.
2. Press TV/VIDEO button to select VIDEO 4 input mode.
3. Operate optional equipment as instructed in equipment manual.

Front control Panel (models CT-32HL42 and CT-36HL42)

Follow the procedure above to connect the optional equipment to front Audio/Video input jacks.

Note: The ON/OFF indicator LED (red) will be lit when set is on.

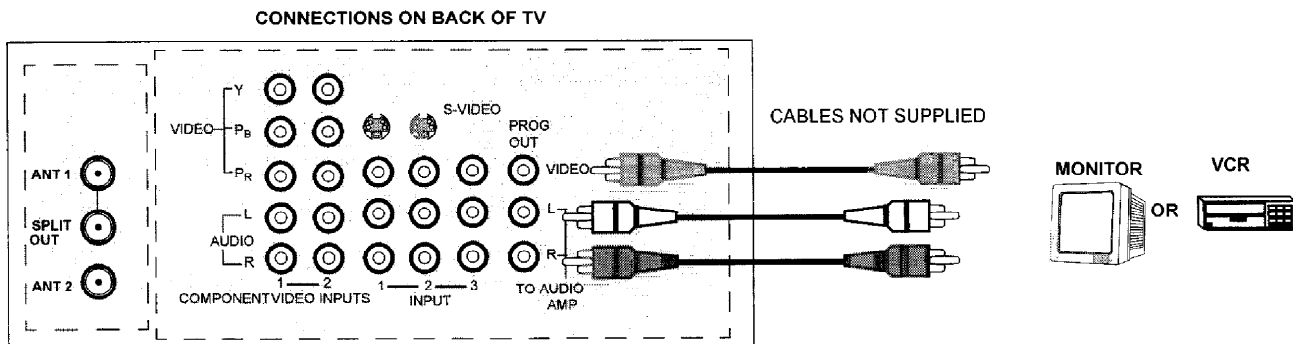


Note: The S-VIDEO connection provides higher quality picture. It overrides VIDEO 4 connections. Use INPUT 4, AUDIO L and R with S-VIDEO connection.

OPTIONAL EQUIPMENT CONNECTIONS

Program Out Connection (PROG OUT)

To use the television audio and video with optional equipment, connect the PROG OUT and TO AUDIO AMP connections on the back of the television.



Procedure

1. Connect optional equipment to PROG OUT and TO AUDIO AMP terminals.
2. PROG OUT terminal display is the same as onscreen display.
3. See optional equipment manual for further instructions for recording and monitoring.

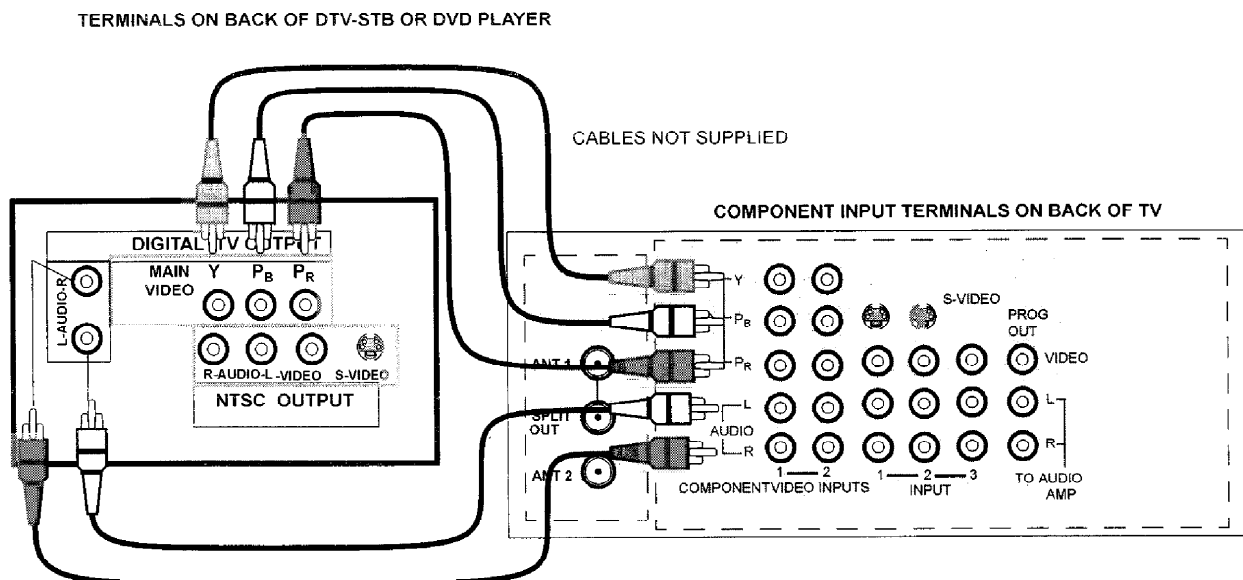
Note: If the Main Picture signal is Component video input, no Program Out signal will be available.

Digital TV - Set-Top Box (DTV-STB) or DVD Connection

This television is capable of displaying 1080i and 480p DTV signals when connected to a DTV Tuner set-top-box (STB). In order to view DTV programming, the STB must be connected to the component video inputs (Y, P_B, P_R) of the television. A DTV signal must be available in your area. Select the output of the STB to either 1080i or 480p.

This television also utilizes a progressive scan doubler, which de-interlaces the NTSC signal and progressively scans the image. This allows you to sit close to the TV and not see the thin black horizontal lines (venetian blind effect) associated with interlaced TV pictures.

Use this diagram to connect the Panasonic DTV-STB (Digital TV-Set-Top Box) or DVD Player to the back of your TV.



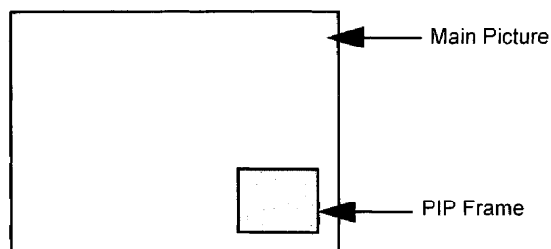
Note: There are 2 sets of three video inputs, Y, P_B, and P_R. Separate component color inputs provide luminance and color separation. Use the L (left) and R (right) audio inputs.

PIP and Split Operation

Note: PIP or Split frame can't display the same channel or video source as Main Picture.

PIP Operation

This television includes a two-tuner Picture In Picture (PIP) feature. This allows you to watch two (2) live broadcasts at the same time with or without an external video source such as a VCR, cable box, etc.



Note: Audio is from Main Picture only.

- ☐ Connect incoming cable to ANT 1 input on back of TV.
- ☐ Press **PIP** to display PIP frame.
- ☐ Select channels for the PIP frame by pressing **PIP CH** (down arrow) or **PIP CH** (up arrow).
- ☐ Select channels for the Main picture by pressing **CH** (up arrow) or **CH** (down arrow) or use the remote control numeric keypad.
- ☐ Press **SWAP** to switch the PIP and MAIN PICTURE source.
- ☐ Press **RECALL** to view picture source status.
- ☐ Press **PIP** to cancel PIP frame.

Split Operation

This feature lets you watch two different channels side by side with or without an external video source.



Note: Audio is from Main Picture only.

- ☐ Press **SPLIT** to display Split screen.
- ☐ Select channels for the Split screen by pressing **PIP CH** (down arrow) or **PIP CH** (up arrow).
- ☐ Select channels for the Main picture by pressing **CH** (up arrow) or **CH** (down arrow) or use the remote control numeric keypad.
- ☐ Press **SWAP** to switch the SPLIT SCREEN and MAIN PICTURE source.
- ☐ Press **RECALL** to view picture source status.
- ☐ Press **SPLIT** to cancel Split screen.

PIP and Split Operation With a Cable Box

To view premium (scrambled) cable channels through your cable box in the Main Picture:

Note: Use this procedure if you want to watch premium cable channels in the Main Picture while viewing a television program or video in the PIP or Split frame.

Procedure

- ☐ Select ANT 2 in the SET UP menu under Prog Chan (Program Channels).
- ☐ Tune TV to Channel 3.
- ☐ Press **PIP** or **SPLIT** on the remote control to display the PIP or Split frame.

Note: Audio is from the Main Picture only.

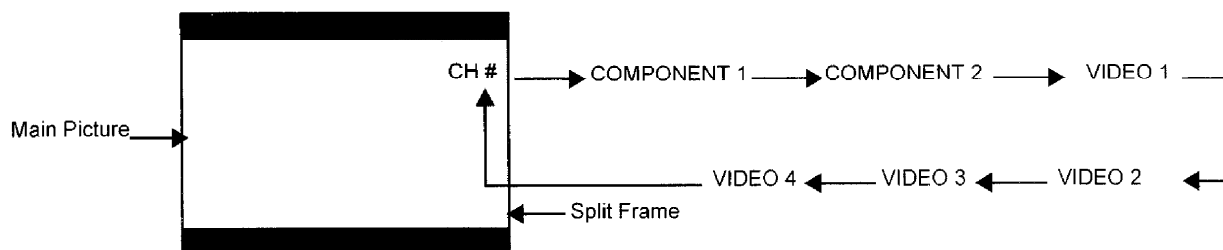
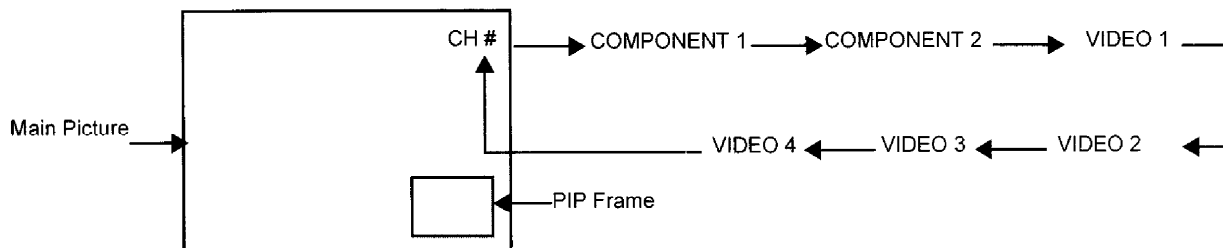
- ☐ Verify the Cable box is ON.
- ☐ Choose channels for the Main Picture by tuning the cable box.
- ☐ Choose channels for the PIP or Split frame by pressing **PIP CH** (down arrow) or **PIP CH** (up arrow).

Note: Swap is not available when using the cable box to tune channels. If your cable box has video output, it can be connected to the TV to allow you to use all PIP or Split functions. See the equipment manual for more information.

PIP and Split Operation (contd.)

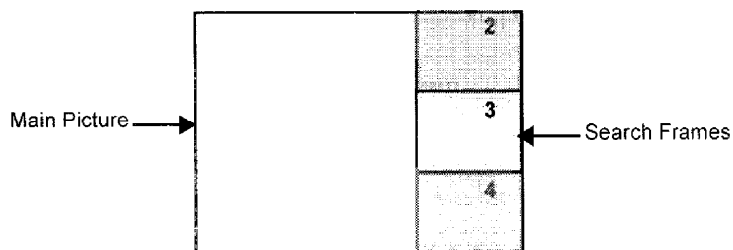
TV/VIDEO Button (PIP and Split)

Press when PIP or Split frame is displayed to select desired input mode.




Search Button (PIP and Split)

This feature lets you scan through all available channels.




- ☐ Press **PIP** or **SPLIT** to display PIP or Split frame.

SEARCH
OPEN/CLOSE

- ☐ Press  to display search frames.

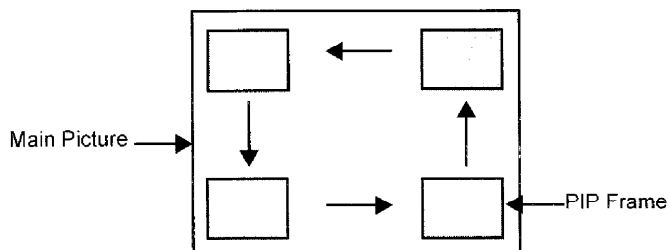
SEARCH
OPEN/CLOSE

- ☐ Press  again to stop search feature. PIP or Split frame channel will be the last active search frame.

- ☐ Press **PIP** or **SPLIT** to cancel PIP or Split frame.


Move Button (PIP only)

This feature is used to move PIP frame to one of four corners.




- ☐ Press **PIP** to display PIP frame.

MOVE

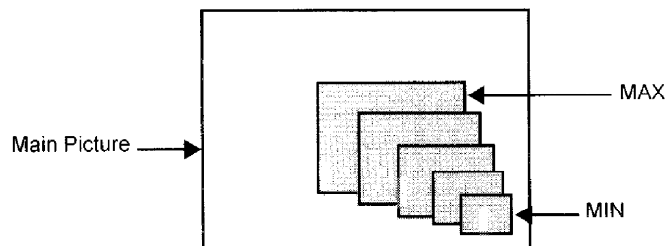
- ☐ Press  to position PIP frame to desired corner.

PIP

- ☐ Press  to cancel PIP frame.

PIP MIN and PIP MAX Buttons

While PIP frame is displayed, press PIP MIN or PIP MAX button to vary the size of PIP frame.




- ☐ Press **PIP** to display PIP frame.

PIP MIN or **PIP MAX**

- ☐ Press  or  to size PIP frame.

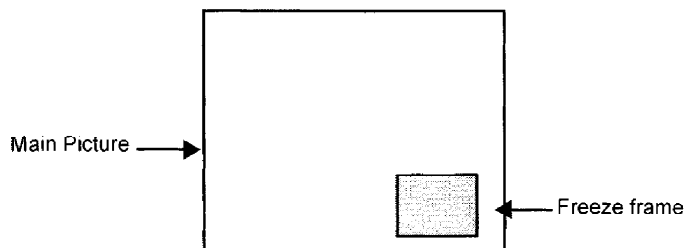
PIP

- ☐ Press  to cancel PIP frame.

PIP and Split Operation (contd.)

Freeze Button (PIP and Split)

This feature is used to stop action in PIP or Split frame.



- ☐ Press **PIP** or **SPLIT** to display PIP or Split frame.

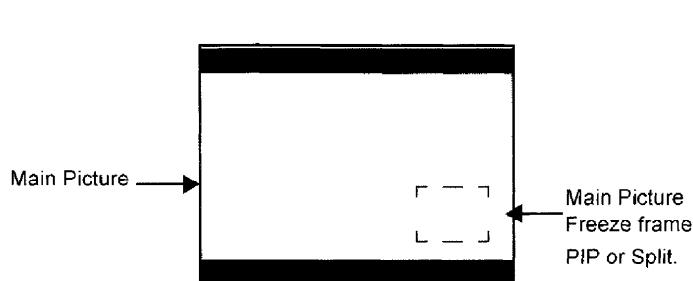
- ☐ Press **FREEZE TV/VCR** to stop PIP or Split frame action.

- ☐ Press **FREEZE TV/VCR** again to continue action.

- ☐ Press **PIP** or **SPLIT** to cancel PIP frame.

Main Picture Freeze Feature

This feature is used to stop action of the Main Picture in display it on a Split or PIP freeze frame.



- ☐ To stop action for Main picture, press **FREEZE TV/VCR** while PIP or Split frame is not displayed.
- ☐ Main Picture freeze will be displayed in a PIP or Split frame, depending on the selection in the Freeze menu located in Picture Other ADJ2 section (refer to page 36).

- ☐ Press **FREEZE TV/VCR** again to cancel Main Picture freeze frame.

Note: While Main Picture freeze frame is displayed, only move button is active for PIP, all other PIP and Split buttons have no effect (see chart below).

PIP, Split and Freeze Mode Buttons Operational Chart

This chart indicates the buttons that are operational with PIP, Split or Main Picture Freeze mode.

REMOTE BUTTONS	PIP MODE	SPLIT MODE	MAIN PICTURE FREEZE MODE
PIP MIN	Size Smaller	No Effect	No Effect
PIP MAX	Size Larger	No Effect	No Effect
FREEZE	Freeze PIP Frame	Freeze Split Frame	Display or Delete
PIP CH	Change Channel	Change Channel	No Effect
SEARCH	Displays Search Frames	Displays Search Frames	No Effect
PIP	Displays PIP Frame	Displays PIP Frame	No Effect
SPLIT	Displays Split Frame	Displays Split Frame	No Effect
MOVE	Move PIP Frame	No Effect	Move PIP Frame
SWAP	Swap With Main Picture	Swap With Main Picture	No Effect

Special Remote Buttons

ASPECT Button

The **ASPECT** button on the remote control lets you select the picture size ratio to match programming format when using DTV STB or DBS.


BBE Button

Press this button to turn the BBE® sound feature **On** or **Off**. BBE® Sound technology enhances speech intelligibility and restores the dynamic range of musical passages to provide outstanding natural sound.


SAP Button

Press this button to let you cycle through different audio modes. If you are receiving a stereo program and you press the SAP button, you can cycle between STEREO and MONO.


Remote Control Operation (models CT-32HL42 and CT-36HL42)




Press to turn ON and OFF.




Press to access second audio program.




Press to mute sound. Press to display and cancel CC (Closed Caption).




Press to select remote operation.




Press to access menus.



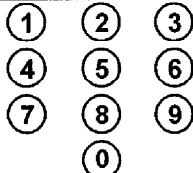
Press to select TV or input modes.




BBE - Press to turn on or off.
MENU - Press to access DBS or DVD menus.



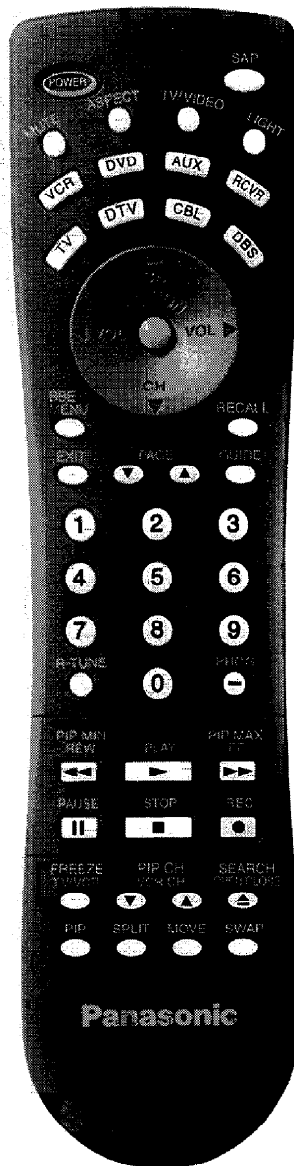
DBS page up/down and DVD skip +/- buttons.




Press numeric keypad to select any channel.




Press to switch to previously viewed channel or input modes.



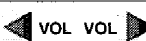
EUR7603Z30



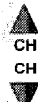
Press to illuminate remote buttons.




Select picture size (ratio) to match programming format (DTV-STB and DBS only).




Press to adjust TV sound and navigate in menus.




Press to select next or previous channel and navigate in menus.




Press to display time, channel, sleep timer, and other options.
















DBS functions button.



DBS functions button.



Press to enter minor number in a compound number.

*PIP MIN REW 	PLAY 	*PIP MAX FF 
PAUSE 	STOP 	REC 
*FREEZE TV/VCR 	*PIP CH VCR CH 	*SEARCH OPEN/CLOSE 
*PIP 	*SPLIT 	*MOVE 
*SWAP 		

*Split or PIP function buttons
Component function buttons

Battery Installation

Use two AA batteries:

Remove battery cover by pushing in and up near arrow.
Install batteries matching (+) and (-) polarity signs.
Replace the battery cover.

Note: Incorrect installation can cause battery leakage and corrosion that will damage the Remote Control

Precautions

- Replace batteries in pairs.
- Do not mix battery types (zinc carbon with alkaline).
- Do not recharge, heat, short-circuit, disassemble, or burn batteries.

Mode Operational Key Chart

This chart defines which keys that are operational after programming (if needed), while in the selected remote control mode TV, DTV, CABLE, DBS, VCR, DVD ...etc.

KEY NAME	TV MODE	DTV MODE	CABLE MODE	DBS MODE
POWER	POWER	POWER	POWER	POWER
SAP	SAP ON/OFF	-	-	-
MUTE	MUTE	TV MUTE	CBL MUTE	TV MUTE
ASPECT	-	DTV ASPECT	-	DBS ASPECT
TV/VIDEO	INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH
CHAN UP	CHANNEL UP	-	CABLE CHANNEL UP	DBS NAVIGATION UP
CHAN DOWN	CHANNEL DOWN	-	CABLE CHANNEL DOWN	DBS NAVIGATION DOWN
VOL RIGHT	VOL +	NAVIGATION RIGHT	CABLE VOL +	DBS NAVIGATION RIGHT
VOL LEFT	VOL -	NAVIGATION LEFT	CABLE VOL -	DBS NAVIGATION LEFT
ACTION	ACTION	ACTION	ENTER	DBS ACTION
BBE/MENU	BBE On or off	STB MENU	-	STB MENU
RECALL	DISPLAY	STB PROGRAM INFO.	TV DISPLAY	STB PROG. INFO
EXIT	-	DTV EXIT	-	STB EXIT
PAGE DOWN	-	STB PAGE DOWN	-	STB PAGE DOWN
PAGE UP	-	STB PAGE UP	-	STB PAGE UP
GUIDE	-	STB PROGRAM GUIDE	-	DBS PROGRAM GUIDE
1	DIGIT 1	STB DIGIT 1	DIGIT 1	DIGIT 1
2	DIGIT 2	STB DIGIT 2	DIGIT 2	DIGIT 2
3	DIGIT 3	STB DIGIT 3	DIGIT 3	DIGIT 3
4	DIGIT 4	STB DIGIT 4	DIGIT 4	DIGIT 4
5	DIGIT 5	STB DIGIT 5	DIGIT 5	DIGIT 5
6	DIGIT 6	STB DIGIT 6	DIGIT 6	DIGIT 6
7	DIGIT 7	STB DIGIT 7	DIGIT 7	DIGIT 7
8	DIGIT 8	STB DIGIT 8	DIGIT 8	DIGIT 8
9	DIGIT 9	STB DIGIT 9	DIGIT 9	DIGIT 9
0	DIGIT 0	STB DIGIT 0	DIGIT 0	DIGIT 0
R-TUNE	PREVIOUS CHAN OR VIDEO MODE	PREVIOUS DTV CHAN	CABLE PREVIOUS	STB PREVIOUS
PROG	-	DTV PROGRAM/DASH	-	STB PROGRAM/DASH
PIP MIN <<REW	TV PIP MIN	-	-	-
PLAY	-	-	-	-
PIP MAX >>FF	-	-	-	-
PAUSE	-	-	-	-
STOP	-	-	-	-
RECORD	-	-	VCR RECORD	STB RECORD
FREEZE/TV/VCR	TV PIP OR SPLIT FREEZE	-	-	STB/DTV/SAT SW
PIP CH ▼ VCR CH	PIP OR SPLIT CHAN ▼	-	CABLE CHANNEL DOWN	STB CHANNEL DOWN
PIP CH ▲ VCR CH	PIP OR SPLIT CHAN ▲	-	CABLE CHANNEL UP	STB CHANNEL UP
SEARCH OPEN/CLOSE	SPLIT OR PIP SEARCH	-	-	-
PIP	PIP ON/OFF	-	-	-
SPLIT	SPLIT ON/OFF	-	-	-
MOVE	MOVE PIP	-	-	-
SWAP	SWAP PIP OR SPLIT WITH MAIN PICTURE	-	-	-
LIGHT	REMOTE BUTTONS			

REMOTE CONTROL OPERATION (MODELS CT-32HL42 AND CT-36HL42)

Mode Operational Key Chart (contd.)

KEY NAME	VCR MODE	DVD MODE		AUX MODE			RCVR MODE
		(DVD)	(CD)	(VCR2)	(TAPE)	(PVR)	
POWER	POWER	POWER	POWER	POWER	POWER	POWER	POWER
SAP	-	-	-	-	-	-	-
MUTE	TV MUTE	TV MUTE	RCVR MUTE	TV MUTE	RCVR MUTE	TV MUTE	RCVR MUTE
ASPECT	-	-	-	-	-	-	-
TV/VIDEO	TV INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH	TV INPUT SW	TV INPUT SW	RCVR INPUT SW
CHAN UP	VCR CHANNEL UP	NAVIGATION UP	NEXT TRACK	VCR CHANNEL UP	-	PVR UP	TUNER +
CHAN DOWN	VCR CHAN DOWN	NAVIGATION DOWN	PREVIOUS TRACK	VCR CHANNEL DOWN	-	PVR DOWN	TUNER -
VOL RIGHT	TV VOLUME +	NAVIGATION RIGHT	TV/RCVR VOLUME UP	TV VOLUME +	RCVR VOLUME +	PVR RIGHT	RCVR VOLUME +
VOL LEFT	TV VOLUME -	NAVIGATION LEFT	TV/RCVR VOLUME DOWN	TV VOLUME -	RCVR VOLUME -	PVR LEFT	RCVR VOLUME -
ACTION	TV ACTION	SELECT	-	TV ACTION	-	SELECT	-
BBE/MENU	-	DVD MENU	-	-	-	-	-
RECALL	ONSCREEN VCR DISPLAY	DVD DISPLAY	TIME FORMAT	ONSCREEN VCR DISPLAY	-	PVR ENTER	-
EXIT	-	-	-	-	-	PVR Exit	-
PAGE DOWN	-	SKIP -	SKIP -	-	-	-	-
PAGE UP	-	SKIP+	SKIP+	-	-	-	-
GUIDE	-	TITLE	NEXT TRACK	-	-	PVR GUIDE	-
1	DIGIT 1	1 CHAPT.	TRACK 1	DIGIT 1	-	DIGIT 1	AV 1
2	DIGIT 2	2 CHAPT.	TRACK 2	DIGIT 2	-	DIGIT 2	AV 2
3	DIGIT 3	3 CHAPT.	TRACK 3	DIGIT 3	-	DIGIT 3	AV 3
4	DIGIT 4	4 CHAPT.	TRACK 4	DIGIT 4	-	DIGIT 4	AV 4
5	DIGIT 5	5 CHAPT.	TRACK 5	DIGIT 5	-	DIGIT 5	CD
6	DIGIT 6	6 CHAPT.	TRACK 6	DIGIT 6	-	DIGIT 6	TUNER
7	DIGIT 7	7 CHAPT.	TRACK 7	DIGIT 7	-	DIGIT 7	PHONO
8	DIGIT 8	8 CHAPT.	TRACK 8	DIGIT 8	-	DIGIT 8	TAPE
9	DIGIT 9	9 CHAPT.	TRACK 9	DIGIT 9	-	DIGIT 9	AUX
0	DIGIT 0	0 CHAPT.	TRACK 0	DIGIT 0	-	DIGIT 0	-
R-TUNE	-	-	-	-	DECK A/B	REPLAY ZONES	-
PROG	-	-	-	-	-	RETURN TO LIVE	-
PIP MIN <<REW	VCR REWIND	SKIP RESEARCH <<	RESEARCH REWIND	VCR REWIND	TAPE REWIND	PVR REWIND	SURROUND -
PLAY	VCR PLAY	DVD PLAY	CD PLAY	VCR PLAY	TAPE PLAY	PVR PLAY	-
PIP MAX >>FF	VCR FF	SKIP RESEARCH FF>>	SEARCH FF	VCR FF	TAPE FF	PVR FF	SURROUND +
PAUSE	VCR PAUSE	DVD PAUSE	CD STILL/PAUSE	VCR PAUSE	TAPE PAUSE	PVR PAUSE	-
STOP	VCR STOP	DVD STOP	CD STOP	VCR STOP	TAPE STOP	PVR STOP	-
RECORD	VCR RECORD	-	-	VCR RECORD	TAPE RECORD	PVR RECORD	-
FREEZE/TV/VCR	TV/VCR SWITCH	-	-	TV/VCR SWITCH	-	INSTAND REPLAY	-
VCR/DBS CHAN ▼	VCR CHANNEL DOWN	SLOW -	RANDOM	VCR CHANNEL DOWN	-	-	CENTER -
VCR/DBS CHAN ▲	VCR CHANNEL UP	SLOW +	REPLAY	VCR CHANNEL UP	-	-	CENTER +
SEARCH OPEN/CLOSE	-	OPEN/CLOSE	OPEN/CLOSE	-	OPEN/CLOSE	QUICK SKIP	-
PIP	-	-	-	-	-	-	-
SPLIT	-	-	-	-	-	-	-
MOVE	-	-	-	-	-	-	-
SWAP	-	-	-	-	-	-	-
LIGHT	REMOTE BUTTONS						

Programming The Remote

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, AUX, RCVR, TV, DTV CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.

Default Modes For Remote Control

Device	Operates	Default
TV	TV (Panasonic Only)	Panasonic TV Codes
DTV	DTV (Panasonic Only)	Panasonic DTV Codes
CABLE	CABLE (Preset)	Panasonic CABLE Codes
DBS	DBS (Preset)	Panasonic DBS Codes
VCR	VCR (Preset)	Panasonic VCR Codes
DVD/CD	DVD and CD (Preset)	Panasonic DVD Codes
AUX	Personal Video Recorders, Tape and VCR2	Panasonic Personal Video Recorders Code
RCVR	Audio Receiver (Preset)	Panasonic RCVR Code

Determine the manufacturer of the component and look in the table for the code.

Programming With A Code

Procedure

- Confirm that the external component is plugged and operating.
- Turn the component off.
- Press **ACTION** and **(POWER)** together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control VCR, DVD (CD), AUX (VCR2 or TAPE), RCVR, DTV, CABLE or DBS.
- Enter the 3-digit component code using the Remote Control numeric keypad (0 ~ 9 buttons).
- Press the Remote Control **(POWER)** to test the component. If the procedure was successful, the component will turn on.

Helpful Hints: Unsuccessful Code

If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes).
If an incorrect code is entered, or if the procedure takes longer than 30 seconds, the programming will fail.

Programming Without A Code

This procedure searches all codes and is called the "sequence method."

- Confirm that the external component is plugged in and on.
- Turn the component off.
- Press **ACTION** and **(POWER)** together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control.
- Press **VOL ►** to move forward to the next code. Press **◀ VOL** to move backward.
- Press the Remote Control **(POWER)** to test the component. If the procedure was successful, the component will turn on.

Note: Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.

- After the code is found, press **ACTION** to store the code.

REMOTE CONTROL OPERATION (MODELS CT-32HL42 AND CT-36HL42)

Component Codes

The Universal Remote Control is capable of operating many component brands after entering a code. Some components may not operate because the codes are not available due to limited memory. The Universal Remote Control does not control all features found in each model.

Write the code numbers from tables in this space. This will serve as a reference if you need to program your Remote Control.

VCR <input type="text"/> <input type="text"/> <input type="text"/>	DVD <input type="text"/> <input type="text"/> <input type="text"/>	DVD (CD) <input type="text"/> <input type="text"/> <input type="text"/>	AUX (VCR 2) <input type="text"/> <input type="text"/> <input type="text"/>	AUX (TAPE) <input type="text"/> <input type="text"/> <input type="text"/>
RECEIVER <input type="text"/> <input type="text"/> <input type="text"/>	DTV <input type="text"/> <input type="text"/> <input type="text"/>	CABLE <input type="text"/> <input type="text"/> <input type="text"/>	DBS <input type="text"/> <input type="text"/> <input type="text"/>	

Codes For VCR

Brand	Code
Admiral	335
Aiwa	332
Akai	314, 315, 316, 329
Audio Dynamic	311, 339
Bell & Howell	305, 313
Broksonic	320, 326
Canon	323, 325
Citizen	306
Craig	305, 306, 329
Curtis Mathes	324, 345
Daewoo	301, 324, 343
DBX	310, 311, 339
Dimensia	345
Emerson	303, 319, 320, 325, 326, 343
Fisher	305, 307, 308, 309, 313
Funai	320, 326, 334
GE	324, 333, 345
Goldstar	306
Gradiente	334
Hitachi	300, 323, 345
Instant Replay	323, 324
Jensen	339
JVC	310, 311, 334, 339
Kenwood	306, 310, 311, 339
LXI	300, 305, 306, 307, 308, 309
Magnavox	323, 324, 331
Marantz	310, 311, 339
Marta	306
Memorex	309, 324
MGA	338, 340, 341, 347, 348
Minolta	300, 345
Mitsubishi	338, 340, 341, 347, 348
Multitech	304, 347
NEC	310, 311, 334, 339
Olympic	323, 324
Optimus	306, 321, 328, 335

Brand	Code
Orion	320, 326
Panasonic	321, 322, 323, 324
J.C. Penney	300, 305, 310, 311, 324, 339, 345
Pentax	300, 311, 345
Philco	320, 323, 324, 326, 331, 343
Philips	323, 324, 331
Pioneer	323
Proscan	300, 301, 302, 323, 324, 331, 333, 345, 346
Quasar	321, 322, 323, 324
Radio Shack	305, 309, 324, 333, 336, 340
RCA	300, 301, 302, 323, 324, 331, 333, 345, 346
Realistic	305, 309, 324, 336, 340
Samsung	302, 304, 333
Sansui	320, 326, 339, 352
Sanyo	305, 309, 313
Scott	301, 302, 304, 309, 320, 326, 338, 340, 347, 348
Sears	300, 305, 306, 307, 308
Sharp	335, 336
Shintom	317
Signature 2000	335
Singer	317
Sony	328, 329, 330
Sylvania	323, 324, 331
Tashiro	306
Tatung	310, 311, 339
Teac	310, 311, 339
Technics	321, 322, 323, 324
Teknika	324
Toshiba	301, 346
Vector Research	311
Wards	306, 309, 335, 336, 344
Yamaha	305, 310, 311, 339
Zenith	306, 344

Component Codes (contd.)

Codes for Cable Box

Brand	Code
ABC	124
Archer	125, 132
Cableview	105, 132
Citizen	105, 122
Curtis	112, 113
Diamond	124, 125, 132
Eagle	129
Eastern	134
GC Brand	105, 132
Gemini	122
General Instrument/ Jerrold	111, 119, 120, 121, 122, 123, 124, 125, 126, 127
Hamlin	112, 118, 140, 141, 142, 145
Hitachi	103, 124
Macom	103, 104, 105
Magnavox	133
Memorex	130
Movietime	105, 132
Oak	102, 137, 139
Panasonic	109, 110, 114
Philips	106, 107, 128, 129, 130
Pioneer	101, 116
Pulsar	105, 132

Brand	Code
Puser	132
RCA	115
Realistic	132
Regal	112, 118, 140, 141, 142, 145
Regency	134
Rembrandt	105, 132, 137
Samsung	105
Scientific Atlanta	111, 112, 113
Simark	101, 105
Sprucer	105, 110
Stargate	105, 132
Teleview	101, 105
Texscan	144
Tocom	135
Toshiba	104
Unika	125, 132
Universal	122, 132
Videoway	106
Viewstar	129, 130
Zenith	100, 117
Zenith / Drake Satellite	100

Codes for DVD

Brand	Code
Denon	100
Ferguson	101
JVC	109
Mitsubishi	105
Nordmende	101
Panasonic	100
Philips	103
Pioneer	102
RCA	101

Brand	Code
Saba	101
Samsung	110
Sharp	108
Sony	104
Technics	100
Thomson	101
Toshiba	103
Yamaha	100
Zenith	107

Codes for Personal Video Recorders

Brand	Code
Panasonic Replay TV	100
Philips Tivo	101
Sony Tivo	102

Component Codes (contd.)**Codes for DBS**

Brand	Code
Dish Network (Echostar)	105, 115, 116
Echo Star	105
Express VU	105, 115
G.E.	106
G.I. (General Instrument)	108
Gradiente	114
Hitachi	103, 111, 112
HNS (Hughes)	103
Magnavox	101, 102

Brand	Code
Panasonic	104
Phillips	101, 102
Primestar	108
Proscan	106, 109, 110, 113
RCA	106, 109, 110, 113
Sony	107
Star Choice	103, 108
Thoshiba	100
Uniden	101, 102

Codes for CD

Brand	Code
Admiral	226
Aiwa	233, 235
Carver	229
Denon	242
Emerson	239
Fisher	205
Harman/Kardon	219, 220, 221, 223
Hitachi	207
Jensen	234
JVC	240, 241, 245
Kardon	223
Kenwood	200, 201, 211, 245
LXI/Sears	236
Magnavox	229, 232
Marantz	229
McIntosh	221
Nakamichi	210
Onkyo	214, 215
Optimus	208, 218, 220, 222

Brand	Code
Panasonic	224, 225, 227
Phillips	229, 230
Pioneer	208
Quasar	224, 225, 227
RCA	231, 237, 238, 247
Sansui	210, 246
Sanyo	205
Scott	210, 246
Sharp	242, 243
Sherwood	220
Sony	228
Soundesign	244
Teac	212, 216, 218
Technics	224, 225, 227
Victor	240, 241, 245
Yamaha	202, 203, 204

Component Codes (contd.)

Codes for Cassette Deck

Brand	Code
Aiwa	223, 224, 225
Denon	231
Fisher	203
Jensen	214
JVC	229, 230
Kenwood	200, 207
Marantz	202
Nakamichi	205
Onkyo	208, 209, 213
Panasonic	216, 218
Philips	222

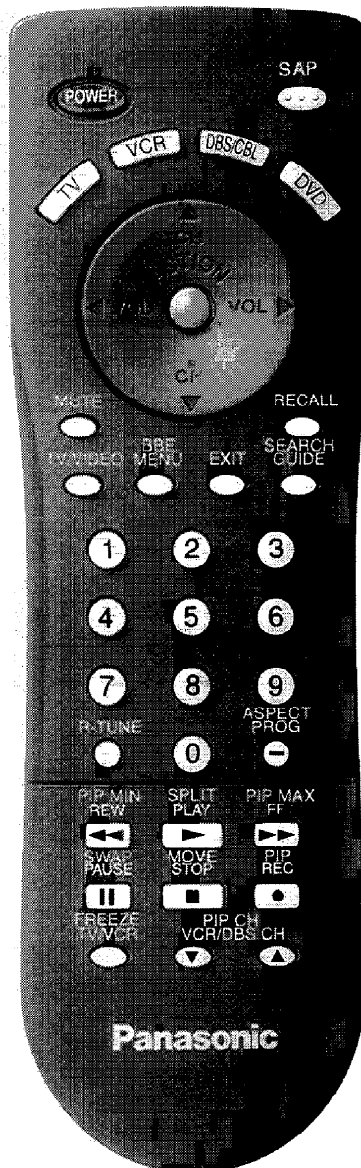
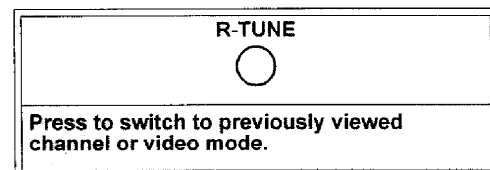
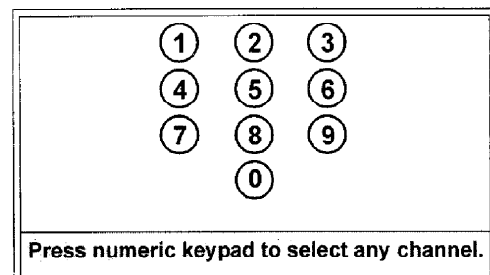
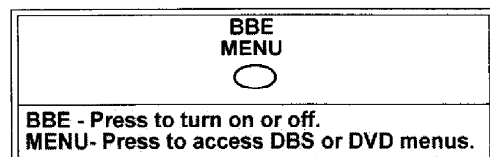
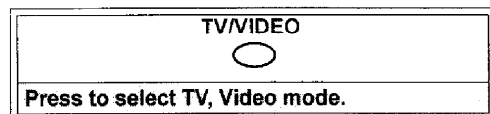
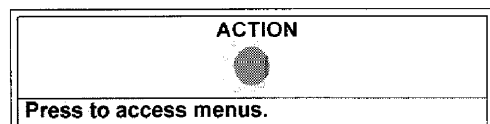
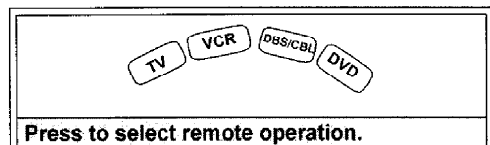
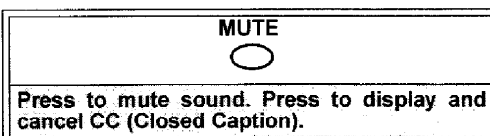
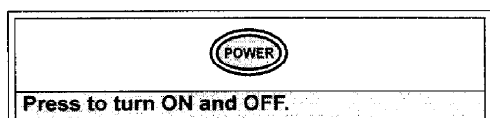
Brand	Code
Pioneer	204
RCA	226, 227, 228
Sansui	205, 210
Sharp	231
Sony	219, 220
Teac	210, 211, 215
Technics	216, 218
Yamaha	201, 202

Codes for Receivers

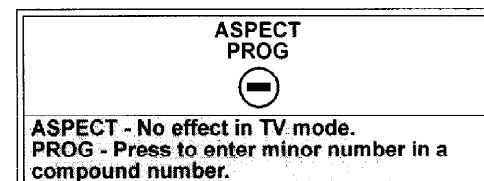
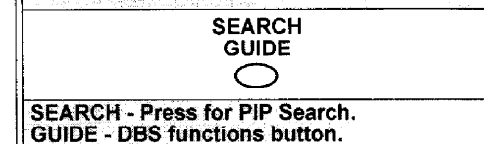
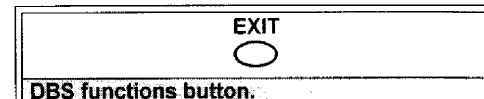
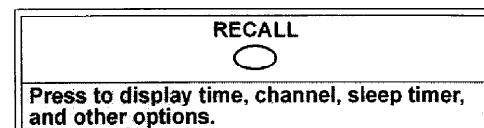
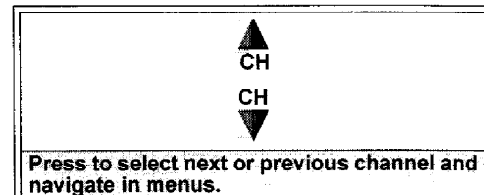
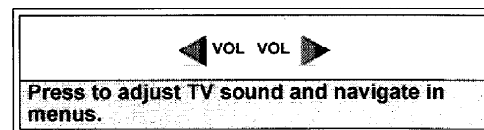
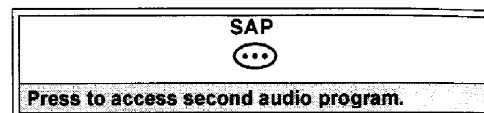
Brand	Code
Admiral	120
Aiwa	125, 126
Denon	134, 135, 136
Fisher	104
Garrard	113
Harman Kardon	115, 123
Jensen	129
JVC	132, 133
Kenwood	100, 108
Magnavox	127
Marantz	124
McIntosh	116
Nakamichi	106
Onkyo	109, 114










Brand	Code
Optimus	103, 127, 130, 131
Panasonic	118, 119, 121
Philips	123
Pioneer	105, 107
Quasar	118, 119, 121
RCA	103, 105, 127, 130, 131
Sansui	103, 111, 139
Sharp	134, 137
Sony	122
Soundesign	138
Teac	111, 112, 113
Technics	118, 119, 121
Victor	132, 133
Yamaha	101, 102

Remote Control Operation (models CT-32HX42 and CT-36HX42)



EUR7613Z40



*PIP MIN REW 	*SPLIT PLAY 	*PIP MAX FF 
*SWAP PAUSE 	*MOVE STOP 	*PIP REC 
*FREEZE TV/VCR 	*PIP CH VCR /DBS CH  	
*Split and PIP function buttons Component function buttons		

Battery Installation

Use two AA batteries:

Remove battery cover by pushing in and up near arrow.
Install batteries matching (+) and (-) polarity signs.
Replace the battery cover.

Note: Incorrect installation can cause battery leakage and corrosion that will damage the Remote Control

Precautions

- Replace batteries in pairs.
- Do not mix battery types (zinc carbon with alkaline).
- Do not recharge, heat, short-circuit, disassemble, or burn batteries.

Mode Operational Key Chart

This chart defines the keys that are operational in the selected component modes (TV, VCR, DBS, CABLE or DVD) after programming (if needed).

KEY NAME	TV MODE	CABLE MODE	DBS MODE
POWER	POWER	POWER	POWER
SAP	SAP ON/OFF	-	-
MUTE	MUTE	TV MUTE	TV MUTE
TV/VIDEO	INPUT SWITCH	TV INPUT SWITCH	TV INPUT SWITCH
BBE/MENU	BBE ON/OFF	-	DBS MENU
CHAN UP	CHANNEL UP	CABLE CHANNEL UP	DBS NAVIGATION UP
CHAN DOWN	CHANNEL DOWN	CABLE CHANNEL DOWN	DBS NAVIGATION DOWN
VOL RIGHT	VOL +	TV VOL +	DBS NAVIGATION RIGHT
VOL LEFT	VOL -	TV VOL -	DBS NAVIGATION LEFT
ACTION	ACTION	-	DBS MENU
RECALL	DISPLAY	TV DISPLAY	DBS PROG. INFO
EXIT	-	-	DBS EXIT
SEARCH/GUIDE	PIP OR SPLIT SEARCH	-	DBS GUIDE
1	DIGIT 1	DIGIT 1	DIGIT 1
2	DIGIT 2	DIGIT 2	DIGIT 2
3	DIGIT 3	DIGIT 3	DIGIT 3
4	DIGIT 4	DIGIT 4	DIGIT 4
5	DIGIT 5	DIGIT 5	DIGIT 5
6	DIGIT 6	DIGIT 6	DIGIT 6
7	DIGIT 7	DIGIT 7	DIGIT 7
8	DIGIT 8	DIGIT 8	DIGIT 8
9	DIGIT 9	DIGIT 9	DIGIT 9
0	DIGIT 0	DIGIT 0	DIGIT 0
R-TUNE	PREVIOUS CHAN OR VIDEO MODE	CABLE PREVIOUS CHANNEL	PREVIOUS DBS CHANNEL
ASPECT PROG	-	-	DBS PROGRAM
PIP MIN <<REW	TV PIP MIN	-	-
SIZE PLAY	TV PIP SIZE	-	-
PIP MAX FF >>	TV PIP ON / OFF	-	-
SWAP PAUSE	TV PIP/SPLIT SWAP	-	-
MOVE STOP	MOVE PIP	-	-
PIP/RECORD	TV PIP ON / OFF	-	-
FREEZE/TV/VCR	PIP OR SPLIT FREEZE	-	-
PIP CH VCR/DBS CH ▼	PIP OR SPLIT CHANNEL DOWN	-	DBS CHANNEL DOWN
PIP CH VCR/DBS CH ▲	TV PIP OR SPLIT CHANNEL UP	-	DBS CHANNEL UP

Mode Operational Key Chart (contd.)

KEY NAME	VCR MODE	DVD MODE
POWER	POWER	POWER
SAP	-	-
MUTE	TV MUTE	TV MUTE
BBE/MENU	-	-
TV/VIDEO	TV INPUT SWITCH	TV INPUT SWITCH
CHAN UP	-	NEXT CHAPTER
CHAN DOWN	-	PREVIOUS CHAPTER
VOL RIGHT	TV VOLUME +	NAVIGATION RIGHT
VOL LEFT	TV VOLUME -	NAVIGATION LEFT
ACTION	-	-
RECALL	ONSCREEN VCR DISPLAY	DVD DISPLAY
EXIT	-	-
SEARCH/GUIDE	-	-
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
0	-	-
R-TUNE	-	-
ASPECT/PROG	-	-
PIP MIN <<REW	VCR REWIND	SKIP SEARCH REW <<
SPLIT PLAY	VCR PLAY	DVD PLAY
PIP MAX FF>>	VCR FF	SKIP SEARCH FF>>
SWAP PAUSE	VCR PAUSE	DVD STILL
MOVE STOP	VCR STOP	DVD STOP
PIP/RECORD	VCR RECORD	-
FREEZE/TV/VCR	TV/VCR SWITCH	OPEN/CLOSE
PIP CH VCR/DBS CH ▼	VCR CHANNEL DOWN	SLOW -
PIP CH VCR/DBS CH ▲	VCR CHANNEL UP	SLOW +

Programming The Remote

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.

Default Modes For Remote Control

Device	Operates	Default
TV	TV (Panasonic Only)	Panasonic TV Codes
VCR	VCR (Preset)	Panasonic VCR Codes
DBS	DBS (Preset)	Panasonic DBS Codes
CABLE	CABLE (Preset)	Panasonic DBS Codes
DVD	DVD, CD (Preset)	Panasonic DVD Codes

Determine the manufacturer of the component and look in the table for the code.

Programming With a Code

Procedure

- Confirm that the external component is plugged in and operating.
- Turn the component off.
- Press **ACTION** and **POWER** together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control VCR, DVD, CABLE or DBS.
- Enter the 3-digit component code using the Remote Control numeric keypad (0 ~ 9 buttons).
- Press the Remote Control **POWER** to test the component. If the procedure was successful, the component will turn on.

Helpful Hints: Unsuccessful Code

If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes).
If an incorrect code is entered, or if the procedure takes longer than 30 seconds, the programming will fail.

Programming Without A Code

This procedure searches all codes and is called the "sequence method."

- Confirm that the external component is plugged in and on.
- Turn the component off.
- Press **ACTION** and **POWER** together, **for at least 5 seconds**.
- Press appropriate component button on the Remote Control.
- Press **VOL ►** to move forward to the next code. Press **◄ VOL** to move backward.
- Press the Remote Control **POWER** to test the component. If the procedure was successful, the component will turn on.

Note: Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.

- After the code is found, press **ACTION** to store the code.

REMOTE CONTROL OPERATION (MODELS CT-32HX42 AND CT-36HX42)

Component Codes

The Universal Remote Control is capable of operating many component brands after entering a code. Some components may not operate because the codes are not available due to limited memory. The Universal Remote Control does not control all features found in each model.

Write the code numbers from tables in this space. This will serve as a reference if you need to program your Remote Control.

VCR	DVD	DBS	CABLE	
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	

Codes For VCR

Brand	Code
Admiral	335
Aiwa	332
Akai	314, 315, 316, 329
Audio Dynamic	311, 339
Bell & Howell	305, 313
Broksonic	320, 326
Canon	323, 325
CCE	343
Citizen	306
Craig	305, 306, 329
Curtis Mathes	324, 345
Daewoo	301, 324, 343
DBX	310, 311, 339
Dimensia	345
Emerson	303, 319, 320, 325, 326, 343
Fisher	305, 307, 308, 309, 313
Funai	320, 326, 334
GE	324, 333, 345
Goldstar	306
Gradiente	334
Hitachi	300, 323, 345
Instant Replay	323, 324
Jensen	339
JVC	310, 311, 334, 339
Kenwood	306, 310, 311, 339
LXI	300, 305, 306, 307, 308, 309
Magnavox	323, 324, 331
Marantz	310, 311, 339
Marta	306
Memorex	309, 324
MGA	338, 340, 341, 347, 348
Minolta	300, 345
Mitsubishi	338, 340, 341, 347, 348
Multitech	304, 347
NEC	310, 311, 334, 339
Olympic	323, 324
Optimus	306, 321, 328, 335

Brand	Code
Orion	320, 326
Panasonic	321, 322, 323, 324
J.C. Penney	300, 305, 310, 311, 324, 339, 345
Pentax	300, 311, 345
Philco	320, 323, 324, 326, 331, 343
Philips	323, 324, 331
Pioneer	323
Proscan	300, 301, 302, 323, 324, 331, 333, 345, 346
Quasar	321, 322, 323, 324
Radio Shack	305, 309, 324, 333, 336, 340
RCA	300, 301, 302, 323, 324, 331, 333, 345, 346
Realistic	305, 309, 324, 336, 340
Samsung	302, 304, 333
Sansui	320, 326, 339, 352
Sanyo	305, 309, 313
Scott	301, 302, 304, 309, 320, 326, 338, 340, 347, 348
Sears	300, 305, 306, 307, 308
Sharp	335, 336
Shintom	317
Signature 2000	335
Singer	337
Sony	328, 329, 330
Sylvania	331, 324, 331
Tashiro	306
Tatung	310, 311, 339
Teac	310, 311, 339
Technics	321, 322, 323, 324
Teknika	324
Toshiba	301, 346
Vector Research	311
Wards	306, 309, 335, 336, 344
Yamaha	305, 310, 311, 339
Zenith	306, 344

Component Codes (contd.)

Codes for Cable Box

Brand	Code
ABC	224
Archer	225, 232
Cableview	205, 232
Citizen	205, 222
Curtis	212, 213
Diamond	224, 225, 232
Eagle	229
Eastern	234
GC Brand	205, 232
Gemini	222
General Instrument/ Jerrold	211, 219, 220, 221, 222, 223, 224, 225, 226, 227
Hamlin	212, 218, 240, 241, 242, 245
Hitachi	203, 224
Macom	203, 204, 205
Magnavox	233
Memorex	230
Movietime	205, 232
Oak	202, 237, 239
Panasonic	209, 210, 214
Philips	206, 207, 228, 229, 230
Pioneer	201, 216
Pulsar	205, 232

Brand	Code
Puser	232
RCA	215
Realistic	232
Regal	212, 218, 240, 241, 242, 245
Regency	234
Rembrandt	205, 232, 237
Samsung	205
Scientific Atlanta	211, 212, 213
Slmark	201, 205
Sprucer	205, 210
Stargate	205, 232
Teleview	201, 205
Texscan	244
Tocom	235
Toshiba	204
Unika	225, 232
Universal	222, 232
Videoway	206
Viewstar	229, 230
Zenith	200, 217
Zenith / Drake Satellite	200

Codes for DVD

Brand	Code
Denon	100
Ferguson	101
JVC	109
Mitsubishi	105
Nordmende	101
Panasonic	100
Philips	103
Pioneer	102
RCA	101

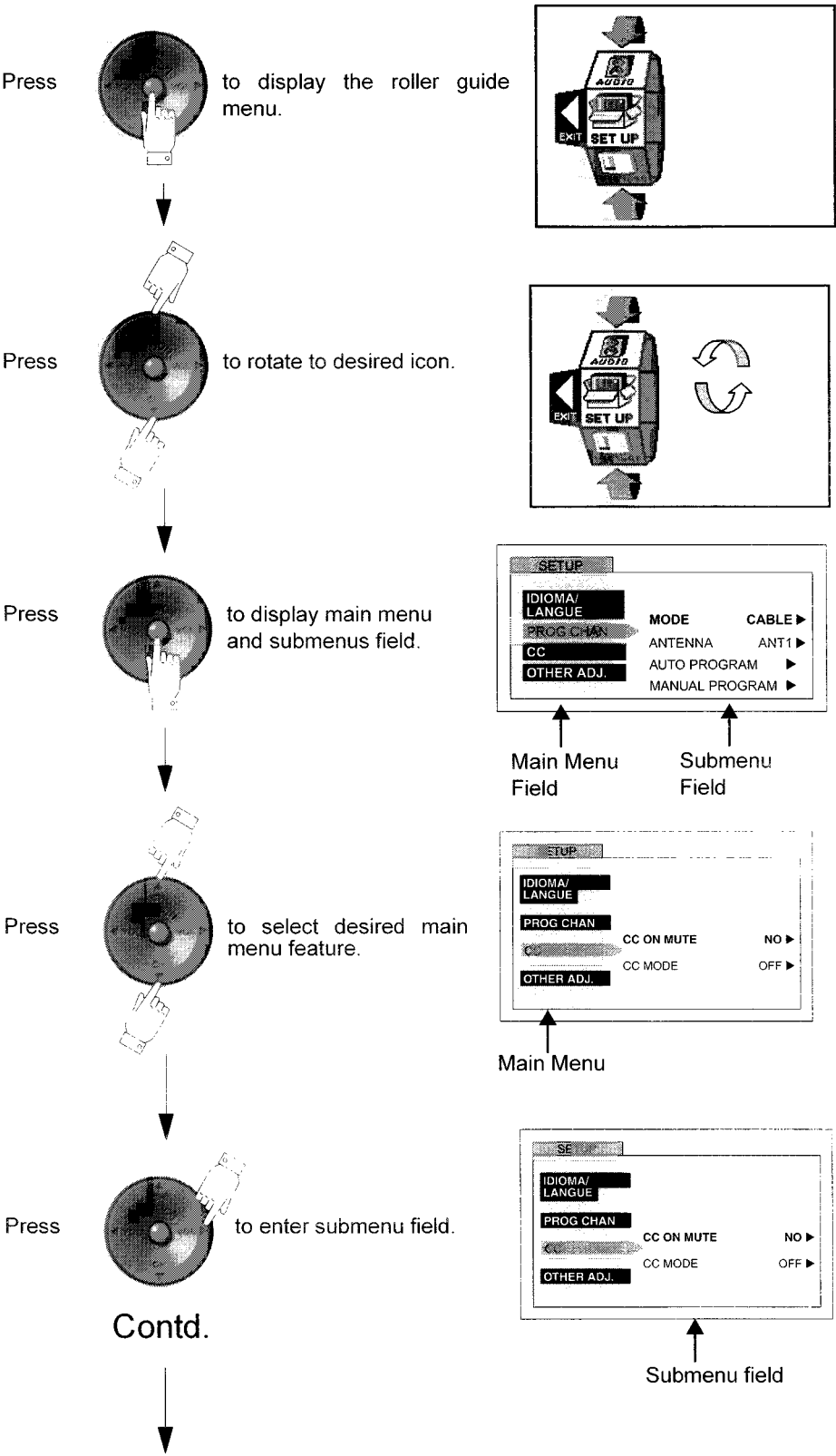
Brand	Code
Saba	101
Samsung	110
Sharp	108
Sony	104
Technics	100
Thomson	101
Toshiba	103
Yamaha	100
Zenith	107

Codes for DBS

Brand	Code
Dish Network (Echostar)	105, 115, 116
Echo Star	105
Express VU	105, 115
G.E.	106
G.I. (General Instrument)	108
Gradiente	114
Hitachi	103, 111, 112
HNS (Hughes)	103
Magnavox	101, 102


Brand	Code
Panasonic	104
Philips	101, 102
Primestar	108
Proscan	106, 109, 110, 113
RCA	106, 109, 110, 113
Sony	107
Star Choice	103, 108
Toshiba	100
Uniden	101, 102

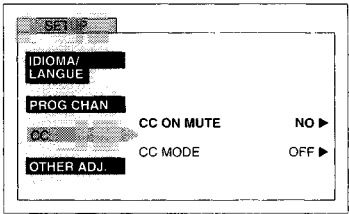
Roller Guide Menu Navigation




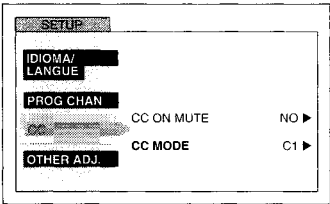
Roller Guide Menu Navigation (contd.)

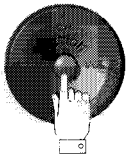
Contd.

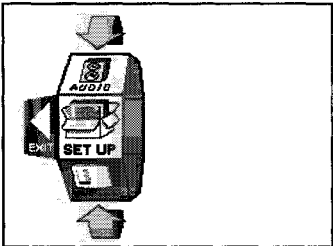
Press  to select desired submenu feature.




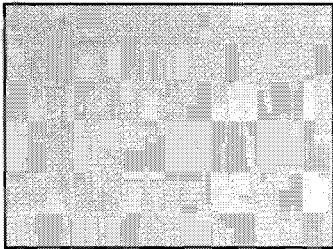
Press  to select or adjust.



Press  twice to return to the roller guide.

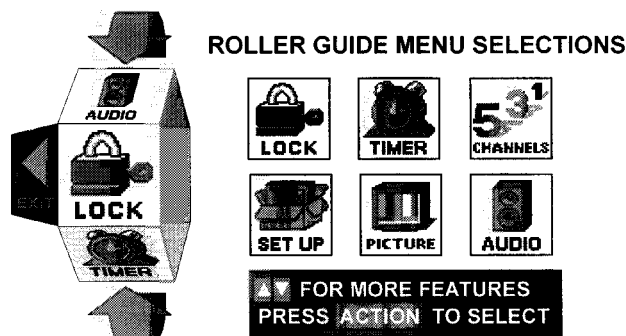


Press  to exit roller guide.




NORMAL PICTURE


Roller Guide Icons





Roller Guide Icon Menus


These charts list all menus under each Roller Guide Icon and which pages to refer to for menus description.


	REFER TO PAGE
IDIOMA/LANGUE <input type="checkbox"/> MODE - (ENGLISH, FRANÇAIS, ESPAÑOL)	31
PROG CHAN <input type="checkbox"/> MODE - (TV or CABLE) <input type="checkbox"/> ANTENNA - (ANT1 or ANT2) <input type="checkbox"/> AUTO PROGRAM <input type="checkbox"/> MANUAL PROGRAM	31
CC (CLOSED CAPTIONED) <input type="checkbox"/> CC ON MUTE <input type="checkbox"/> CC MODE	32
OTHER ADJ. <input type="checkbox"/> AUTO POWER <input type="checkbox"/> CHAN BANNER <input type="checkbox"/> GEOMAGNETIC CORR <input type="checkbox"/> TILT CORRECTION	32 32 33 33

	REFER TO PAGE
AUDIO ADJ. <input type="checkbox"/> MODE - (STEREO, SAP or MONO) <input type="checkbox"/> BASS, TREBLE, BALANCE or NORMAL	39
OTHER ADJ. <input type="checkbox"/> AI SOUND <input type="checkbox"/> BBE	39
SURROUND <input type="checkbox"/> MODE	39
SPEAKERS <input type="checkbox"/> ON <input type="checkbox"/> OFF & VARIABLE AUDIO OUT <input type="checkbox"/> OFF & FIXED AUDIO OUT	39

	REFER TO PAGE
CLOCK SET <input type="checkbox"/> TIME <input type="checkbox"/> DAY	34
SLEEP <input type="checkbox"/> HOW LONG?	34
TIMER1 or TIMER2 <input type="checkbox"/> DAY <input type="checkbox"/> ON TIME <input type="checkbox"/> OFF TIME <input type="checkbox"/> ENTER CHANNEL <input type="checkbox"/> SET	34

	REFER TO PAGE
VIDEO ADJ <input type="checkbox"/> PIC MODE <input type="checkbox"/> COLOR, TINT, BRIGHTNESS, PICTURE, SHARPNESS OR NORMAL	35
OTHER ADJ1 <input type="checkbox"/> COLOR TEMPERATURE <input type="checkbox"/> NATURAL COLOR <input type="checkbox"/> VIDEO NR <input type="checkbox"/> 3D Y/C FILTER <input type="checkbox"/> ASPECT	35 35 35 36 36
OTHER ADJ2 <input type="checkbox"/> COLOR MATRIX <input type="checkbox"/> VM <input type="checkbox"/> FREEZE	36

	REFER TO PAGE
FAVORITES <input type="checkbox"/> CHANNEL SCAN (ALL or FAV)	37
CAPTION <input type="checkbox"/> PRESET CAPTION <input type="checkbox"/> MANUAL CAPTION <input type="checkbox"/> INPUT LABEL	37 38

	REFER TO PAGE
MODE <input type="checkbox"/> LOCK SET - (ALL, CHANNEL, GAME) <input type="checkbox"/> BLOCK PROGRAM <input type="checkbox"/> HOW LONG?	40
V-CHIP OPERATION	41

Roller Guide Icon Menu Operation

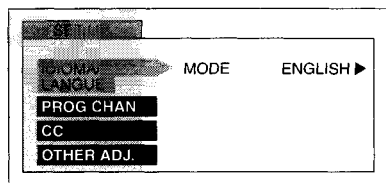
SET UP



Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

IDIOMA/LANGUE (Menu Languages)

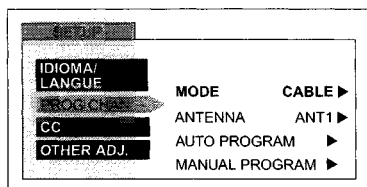
- In SET UP Menu, select IDIOMA/LANGUE to change menu language to ENGLISH, ESPAÑOL (Spanish) or FRANÇAIS (French).



- Press **VOL** ► to select English, Spanish or French.

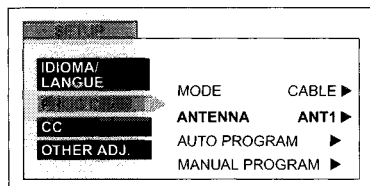
Prog Chan (Program Channels)

- **MODE** - To select TV (antenna) or CABLE mode depending on the signal source.



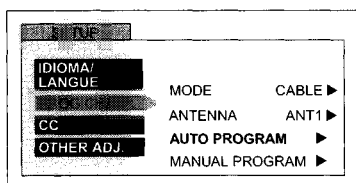
- Press **VOL** ► to select TV or CABLE.

- **ANTENNA** - To select either ANT1 or ANT2.



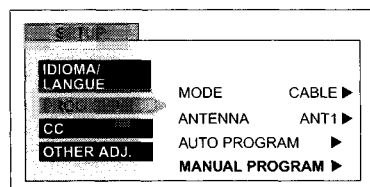
- Press **VOL** ► to select ANT2 or ANT1.

- **AUTO PROGRAM** - To automatically program all channels with a signal.

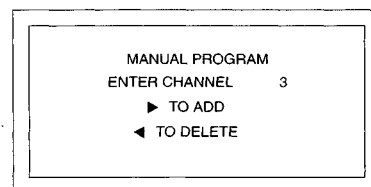


- Press **VOL** ► to start AUTO PROGRAM.

- **MANUAL PROGRAM** - To manually add or delete channels.



- Press **VOL** ► to display next menu.



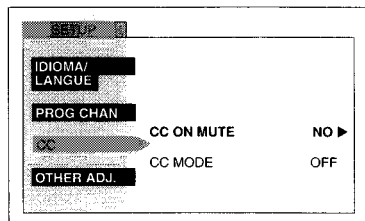
Note: Use Remote numeric keypad to enter channel numbers.

CC (Closed Captioning)

This television contains a built-in decoder that displays **CC** (Closed Captioned) text across the screen (white or colored letters on black background). It allows the viewer to read the dialogue of a television program or other information. The program viewed must include Closed Captioning for the feature to work.

- ☐ **CC** On Mute - Activates the onscreen Closed Caption feature when the **MUTE** button on the remote control is pressed. To deactivate press **MUTE** button again.

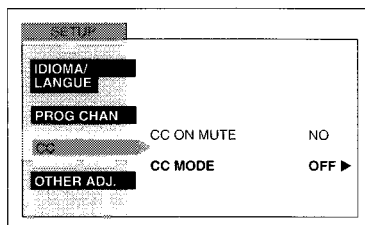
Note: This feature only functions when the Closed Caption Mode is OFF. The program being viewed must be broadcast with Closed Captioning. (Refer to your local TV guide).



- ☐ Press **VOL** ► to select C1, C2, C3 or C4.

Note: C1 mode is recommended.

- ☐ **CC** Mode - Activates the onscreen Closed Caption feature by selecting one of the following modes.



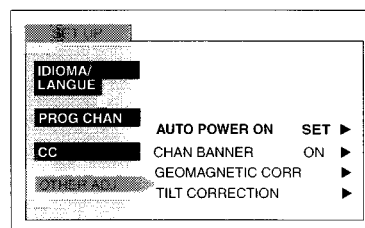
- ☐ Press **VOL** ► to select:

- OFF - When Closed Caption is not desired.
- C1 - For video related information to be displayed, up to 4 lines onscreen at a time. (It does not block relevant parts of the picture). Text may be in any language.
- C2 to C4 - For other modes of video related information.
- T1 to T4 - For program guide and other information to be displayed, when available. (Blocks a large portion of the picture on the television screen).

Note: C1 mode is recommended for viewing Closed Caption.

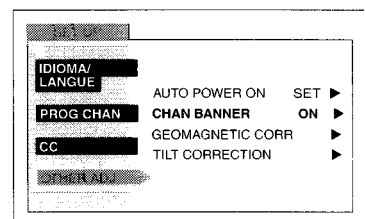
Other Adjustments

- ☐ **AUTO POWER ON** - Select SET to power up the TV at the same time as the Cable box or other components or select OFF.



- ☐ Press **VOL** ► to select OFF or SET.

- ☐ **CHAN BANNER** - Select ON to display onscreen banner when changing channels.

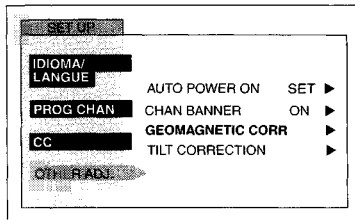


- ☐ Press **VOL** ► to select ON or OFF.

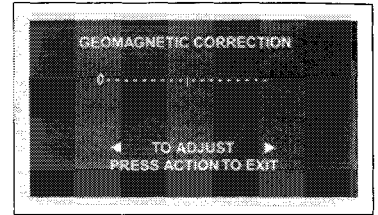
Note: Press **RECALL** to display onscreen Channel Banner at any time.

Other Adjustments (contd.)

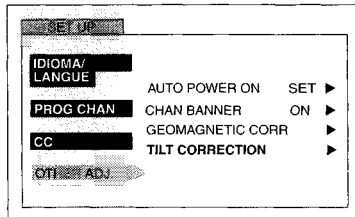
- ❑ **GEOMAGNETIC CORRECTION** - This feature is used to adjust discoloration of the picture due to earth's magnetic field in the area.



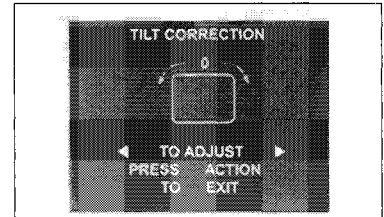
- ❑ Press **VOL ▶** to display adjustment menu.
- ❑ Press **◀ VOL** or **VOL ▶** to adjust discoloration in picture.



- ❑ **TILT CORRECTION** - This feature is used to adjust the tilt of the picture due to earth's magnetic field in the area.



- ❑ Press **VOL ▶** to display adjustment menu.
- ❑ Press **◀ VOL** or **VOL ▶** to adjust picture tilt.



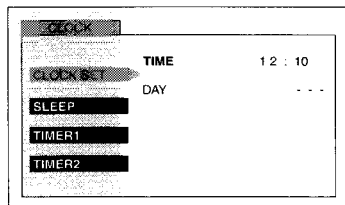
TIMER



Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

Clock Set

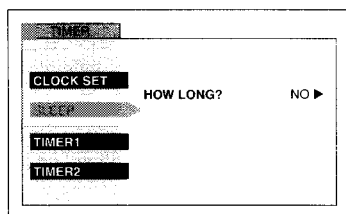
- ☐ **Time** - Set the time and the day of the week.



- ☐ Press **◀ VOL** or **VOL ▶** to select hours AM or PM.
- ☐ Press **CH ▼** to select minutes position.
- ☐ Press **◀ VOL** or **VOL ▶** to select minutes.
- ☐ Press **CH ▼** to select DAY.
- ☐ Press **◀ VOL** or **VOL ▶** to select day of the week.

Sleep

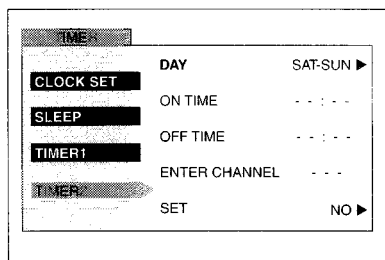
- ☐ In **TIMER** menu, select **SLEEP** to turn television off in 30, 60 or 90 minutes. Select **NO** to turn off timer.



- ☐ Press **VOL ▶** to select 30, 60, 90 or **NO**.

Timer 1 and Timer 2 - In **TIMER** menu, select one or both timers to turn the television on and off at selected times, on selected channels, and on selected days.

Nota: *TIME must be entered in CLOCK SET to operate the TIMER features.*



- ☐ Press **VOL ▶** to select day or days.
- ☐ Press **CH ▼** to select **ON TIME**, then press **VOL ▶**.
- ☐ Repeat for setting **OFF TIME**.
- ☐ Press **CH ▼** to select **ENTER CHANNEL**, then press **VOL ▶** to select channel.
- ☐ Press **CH ▼** to select **SET**, then press **VOL ▶** to select **YES**.

Turn Off After 90 Minutes

The television automatically turns OFF after 90 minutes when turned ON by the **TIMER**. If the OFF time is selected or if a key is pressed, the automatic OFF after 90 minutes will be cancelled.

TIMER Activation

The **TIMER** is active when the television is OFF or ON. The television will switch to the selected channel at the selected time set in the **TIMER**.

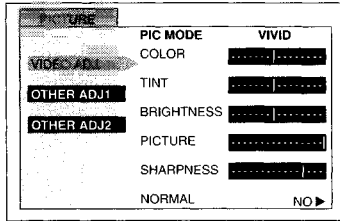
PICTURE



Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

Video Adj.

- ☐ **PIC MODE** - Lets you choose one of three pre-set Picture Modes that best suit the program you are viewing.

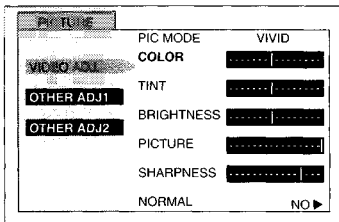


- ☐ Press **◀ VOL** or **VOL ▶** to select.

- **VIVID** - This is the default mode. It provides enhanced picture contrast and sharpness for viewing in a well-lighted room.
- **STANDARD** - Recommended for normal viewing conditions with subdued room lighting.
- **CINEMA** - Select mode for watching movies in a darkened room. It provides a soft, film-like picture.

Note: Each mode has its own picture settings (Color, Tint, Brightness, Picture and Sharpness).

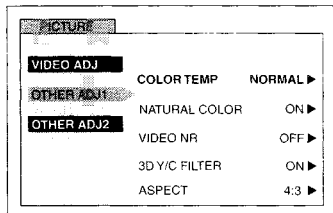
- ☐ **COLOR** - Adjusts desired color intensity.
- ☐ **TINT** - Adjusts natural flesh tones.
- ☐ **BRIGHTNESS** - Adjusts dark areas of picture.
- ☐ **PICTURE** - Adjusts white areas of picture.
- ☐ **SHARPNESS** - Adjusts clarity of outline detail.
- ☐ **NORMAL** - Reset selected PIC mode adjustments to factory default settings.



- ☐ Press **CH ▼** to select desired picture adjustment.
- ☐ Press **◀ VOL** or **VOL ▶** to adjust.

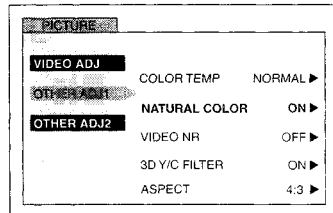
Other Adj1

- ☐ **COLOR TEMP** (temperature) - To increase or decrease WARM (red) and COOL (blue) colors to suit personal preferences.



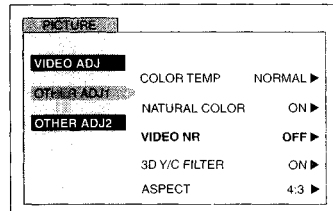
- ☐ Press **VOL ▶** to select WARM, COOL or NORMAL.

- ☐ **NATURAL COLOR** - To increase the color reproduction range with natural color gradation and highly delicate hues.



- ☐ Press **VOL ▶** to select OFF or ON.

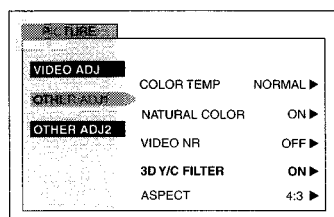
- ☐ **VIDEO NR** - Reduces noise in the channel, commonly called snow. Remains on when receiving weak signal.



- ☐ Press **VOL ▶** to select OFF or ON.

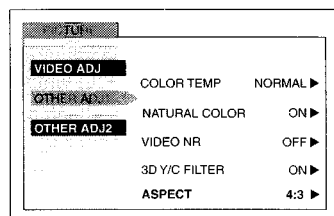
Video Adj1 (contd.)

- ☐ 3D Y/C FILTER - Minimizes noise and cross color in the picture.



- ☐ Press **VOL** ► to select OFF or ON.

- ☐ ASPECT - Select picture size (ratio) to match programming format.

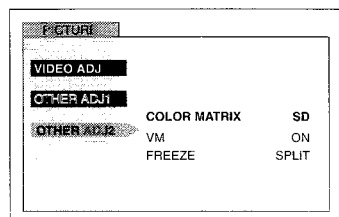


- ☐ Press **VOL** ► to select 16:9 or 4:3.

Other Adj2

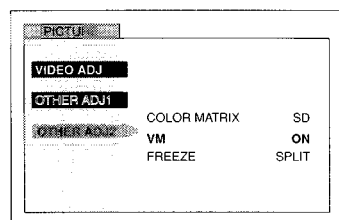
- ☐ COLOR MATRIX - Select HD or SD to automatically adjust color parameters for HD (high definition) and SD (standard definition). This feature is not selectable when viewing regular TV (NTSC) programs.

Note: When viewing a non-standard DTV signal format, you can change color parameters manually for the best picture quality.



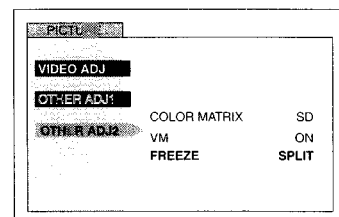
- ☐ Press **VOL** ► to select HD or SD.

- ☐ VM (VELOCITY MODULATION) - Increase picture sharpness and provides crisp white to black transitions.



- ☐ Press **VOL** ► to select ON or OFF.

- ☐ FREEZE - This feature is used to freeze main picture and display it in a PIP or SPLIT frame, when the FREEZE button on the remote control is pressed. Press FREEZE again to delete frame. SWAP, SIZE, SEARCH, PIP MIN and PIP MAX are not functional in this mode.



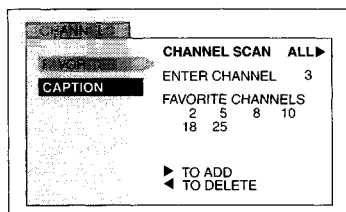
- ☐ Press **VOL** ► to select PIP or SPLIT.

CHANNELS



Favorites

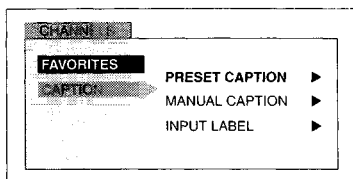
- ☐ CHANNEL SCAN FAV - To enter up to 16 favorite channels.
- ☐ CHANNEL SCAN ALL - To scan all channels when using the CH up/down buttons.



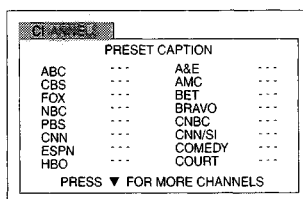
- ☐ Press **VOL** ► to select FAV or ALL.
- ☐ If FAV is selected, press **CH** ▼ to select ENTER CHANNEL.
- ☐ Use remote numeric keypad to select desired channel.
- ☐ Press **VOL** ► to add or ◀ **VOL** to delete.

Caption

- ☐ PRESET CAPTION - To enter channel numbers for popular TV stations.



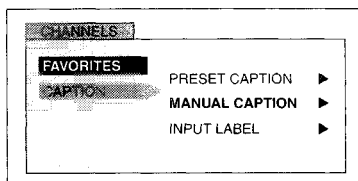
- ☐ Press **VOL** ► to display next menu.



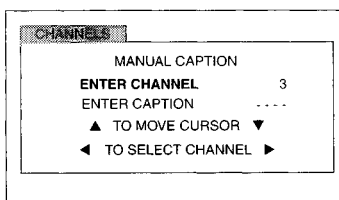
- ☐ Press **CH** ▼ to select desired preset caption.
- ☐ Use remote numeric keypad to select desired channel (refer to your local TV guide).

Note: To delete a channel, press ◀ **VOL** while channel is highlighted.

- ☐ MANUAL CAPTION - To enter numbers and captions manually.



- ☐ Press **VOL** ► to display next menu.

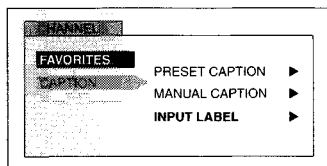


- ☐ Use remote numeric keypad to select desired channel (refer to your local TV guide).
- ☐ Press **CH** ▼ to select ENTER CAPTION.
- ☐ Press ◀ **VOL** or **VOL** ► to select characters.

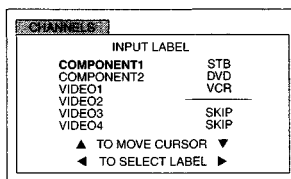
Note: Delete channel captions by entering spaces in all four character slots.

CHANNELS (contd.)

- ❑ INPUT LABEL - To label video input connections for onscreen display.



- ❑ Press **VOL ▶** to display next menu.



- ❑ Press **CH ▼** or **CH ▲** to move cursor.
- ❑ Press **◀ VOL** or **VOL ▶** to select desired preset input label (see chart below).

INPUT LABEL CHART

PRESET LABELS	REASON FOR SELECTING
VCR	Select when VCR is connected to video input.
DVD	Select when DVD is connected to video input.
SKIP	Select to skip unused video input when pressing TV/VIDEO button.
CABLE	Select when CABLE box is connected to video input.
DBS	Select when DBS is connected to video input.
DTV STB	Select when digital TV set-top-box is connected to video input.
PVR (Personal Video Recorder)	Select when a personal video recorder is connected to video input.
GAME	Select when Video GAME is connected to video input.
AUX	Select when other components are connected.
_____	Select to delete input label.

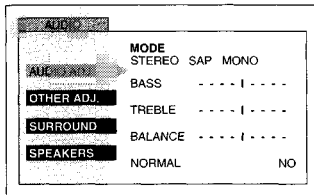
AUDIO



Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

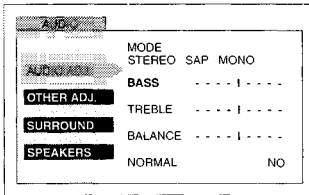
Audio ADJ.

- ☐ **MODE** - Select STEREO, SAP (Second Audio Program) or MONO. (Use MONO when stereo signal is weak).



- ☐ Press **VOL** ► to select STEREO, SAP or MONO.

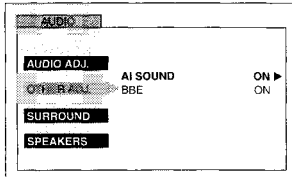
- ☐ **BASS** - Increase or decrease the bass response.
- ☐ **TREBLE** - Increase or decrease the treble response.
- ☐ **BALANCE** - Emphasize the left/right speaker volume.
- ☐ **NORMAL** - Reset BASS, TREBLE and BALANCE adjustments to factory default settings.



- ☐ Press ◀ **VOL** or **VOL** ► to adjust.

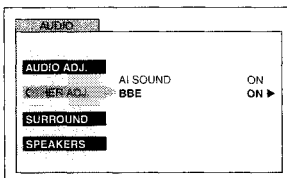
Other ADJ.

- ☐ **AI SOUND** - Equalize overall volume levels across all channels. (AI sound is not available in VIDEO mode).



- ☐ Press **VOL** ► to select ON or OFF.

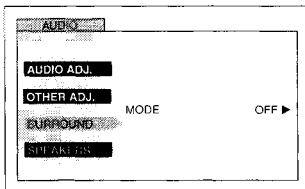
- ☐ **BBE®** - Sound technology enhances speech intelligibility and restores the dynamic range of musical passages to provide outstanding natural sound.



- ☐ Press **VOL** ► to select ON or OFF.

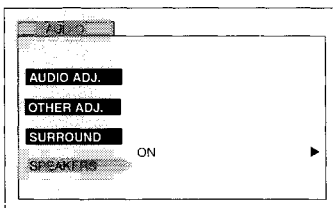
Surround

- ☐ **MODE** - Enhances audio response when listening to stereo.



- ☐ Press **VOL** ► to select ON or OFF.

Speakers



- ☐ Press **VOL** ► to select:
 - **ON** - TV speakers operate normally.
 - **OFF & Variable Audio Out** - TV speakers off - audio adjustable by television.
 - **OFF & Fixed Audio Out** - TV speakers off - audio adjustable by the external amplifier only.

LOCK

Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

Mode (Lock Set)

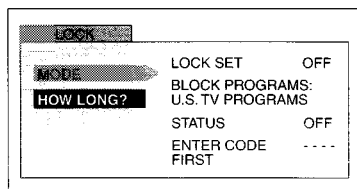
Select LOCK SET to prevent video games and VCR tapes from being viewed.

- ☐ Use the remote numeric keypad to enter a four-digit secret code (*Use a code that is easy to remember and record it in a safe place*).

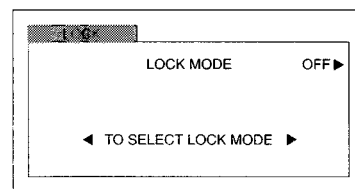
Notes:

- If you do not remember your code, LOCK will unlock in 12, 24, or 48 hours, depending on the current setup. Be cautious when selecting ALWAYS. If ALWAYS is selected, and you forget your secret code, the TV must be serviced by a qualified technician to clear the LOCK setup.
- If you select CHANGE CODE, and you change your code from the one used in the LOCK menu, your new code becomes the controlling code.

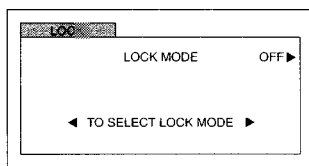
- ☐ OFF - Turns Lock function off.



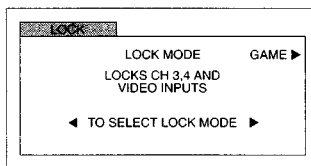
- ☐ Press VOL ► to display LOCK MODE menu.




- ☐ GAME - Lock CH 3, 4 and Video inputs.

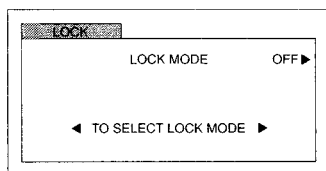


- ☐ Press VOL ► to select GAME.

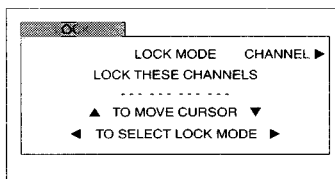


- ACTION**
- ☐ Press  twice.
 - ☐ Press CH ▼ to highlight HOW LONG?.
 - ☐ Press VOL ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.


- ☐ CHANNEL - Lock up to four channels.



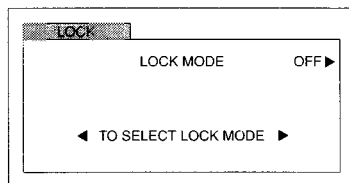
- ☐ Press VOL ► to select CHANNEL.



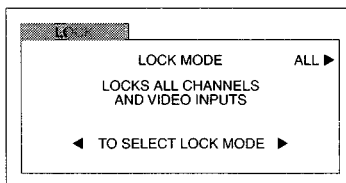
- ☐ Press CH ▼ or CH ▲ to select channel position.
- ☐ Press ◀ VOL or VOL ► or use remote numeric keypad to select channels.


- ACTION**
- ☐ Press  twice.
 - ☐ Press CH ▼ to highlight HOW LONG?.
 - ☐ Press VOL ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.

- ☐ All - Locks all channels and video inputs.



- ☐ Press VOL ► to select ALL.



- ACTION**
- ☐ Press  twice.
 - ☐ Press CH ▼ to highlight HOW LONG?.
 - ☐ Press VOL ► to select 12 Hours, 24 Hours, 48 Hours or ALWAYS.

Note: PG will display on screen if a blocked channel or video input is selected.

Note: If GAME, CHANNEL or ALL is selected, and if a blocked channel or video input is selected, the message LOCKED displays in the upper left corner of the TV screen.

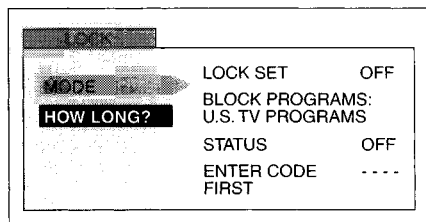
V-CHIP Menu Operation



Note: Refer to page 28 for Roller Guide Menu Navigation procedures.

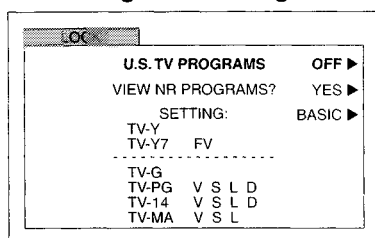
U.S. TV PROGRAMS

This TV model features the "V-Chip technology" which allows you to use U.S. TV PROGRAMS Guide ratings to block various types of TV programs. PIP will also be blocked automatically.

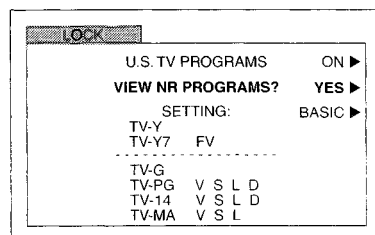


- ☐ Use the numeric keypad to enter your four digit code.
(Use a code that is easy to remember and record it in a safe place.)
- ☐ Press CH ▼ to enter the BLOCK PROGRAMS field.
- ☐ Press ◀ VOL or VOL ▶ to select U.S. TV PROGRAMS.
- ☐ Press CH ▼ to highlight STATUS.
- ☐ Press ◀ VOL or VOL ▶ to display U.S TV PROGRAMS RATING CHART.

U.S. TV Programs Rating Chart



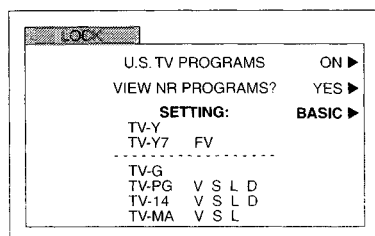
- ☐ Press VOL ▶ to select U.S. TV PROGRAMS ON or OFF.
- ☐ Press CH ▼ to select VIEW NR PROGRAMS?



- ☐ Press VOL ▶ to select VIEW NR PROGRAMS? YES or NO.

Note: Selecting "Yes", NR programs will be received. Selecting "NO", NR programs will be blocked. See Customer Caution below.

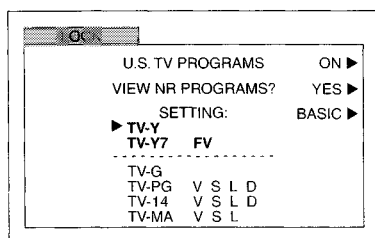
- ☐ Press CH ▼ to select SETTING.



- ☐ Press VOL ▶ to select BASIC or DETAILED.

BASIC - Allows you to select only general ratings such as TV-Y, TV-PG, etc.

DETAILED - Allows you to select both general ratings and content such as V, L, etc.



- ☐ Press CH ▼ or CH ▲ to move between different ratings.
- ☐ Use ◀ VOL or VOL ▶ to select ratings you want to block (RED) and unblock (GREEN).

Note: See the U.S. TV PROGRAMS RATINGS CHART.

- ☐ Press ACTION twice to return to MODE in Lock menu.
- ☐ Press CH ▼ to select HOW LONG?
- ☐ Press ◀ VOL or VOL ▶ to select 12, 24, 48 hours or ALWAYS.

U.S. TV Programs Menu Chart (contd.)

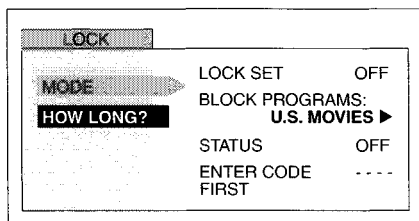
Customer Caution	
<p>The V-Chip system that is used in this set is capable of blocking "NR" programs (non rated, not applicable and none) per FCC Rules Section 15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"</p> <ul style="list-style-type: none"> • Emergency Bulletins (Such as EAS messages, weather warnings and others) • Locally originated programming • News • Political • Public Service Announcements • Religious • Sports • Weather 	

U.S. TV PROGRAMS RATINGS CHART

NR	Not Rated. SEE CUSTOMER CAUTION on previous page.
TV-Y	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
TV-Y7	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
TV-G	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
TV-PG	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
TV-14	Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.
TV-MA	Mature audiences only. This program may contain mature themes, profane language, graphic violence, and explicit sexual content.
FV	FANTASY/CARTOON VIOLENCE
V	VIOLENCE
S	SEX
L	OFFENSIVE LANGUAGE
D	DIALOGUE WITH SEXUAL CONTENT

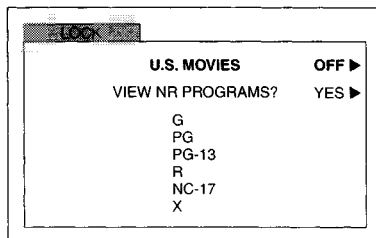
U.S. MOVIES

This TV model features the "V-Chip technology" which allows you to use Motion Picture Ratings when viewing movies or video tapes. This innovation allows parents to block various types of movies and video tapes at their discretion. PIP will also be blocked automatically.

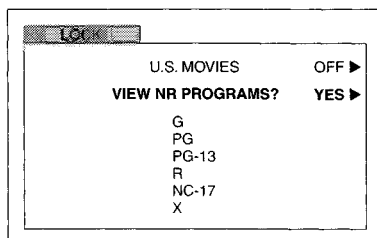


- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press **CH ▼** to enter the BLOCK PROGRAMS field.
- ☐ Press **◀ VOL** or **VOL ▶** to select U.S. MOVIES.
- ☐ Press **CH ▼** to highlight STATUS.
- ☐ Press **◀ VOL** or **VOL ▶** to display U.S MOVIES RATING CHART.

U.S. Movies Menu Chart

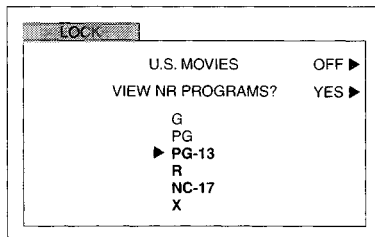


- ☐ Press **VOL** **▶** to select U.S. MOVIES ON or OFF.
- ☐ Press **CH** **▼** to select VIEW NR PROGRAMS?



- ☐ Press **VOL** **▶** to select VIEW NR PROGRAMS? YES or NO.

Note: Some movies are not rated for a variety of reasons. Old movies and foreign films are usually not rated.



- ☐ Press **CH** **▼** or **CH** **▲** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (**RED**) and unblock (**GREEN**).

Note: See the U.S. MOVIES CHART.

- ☐ Press **ACTION** **●** twice to return to MODE in Lock menu.
- ☐ Press **CH** **▼** to select HOW LONG?
- ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.

PG-13, R, NC-17 and X will be blocked.

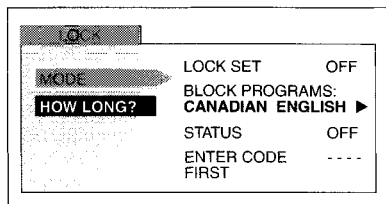
U.S. MOVIES RATINGS CHART

NR	CONTAINS NO RATING (NOT RATED) AND NA (NOT APPLICABLE) PROGRAMS. Movie has not been rated or rating does not apply.
G	GENERAL AUDIENCES. All ages admitted.
PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
PG-13	PARENTS STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.
R	RESTRICTED. Under 17 requires accompanying parent or adult guardian.
NC-17	NO ONE 17 AND UNDER ADMITTED.
X	ADULTS ONLY.

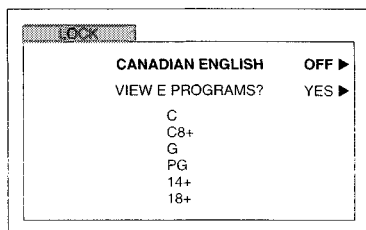
Rating Systems for Canada

Canadian English

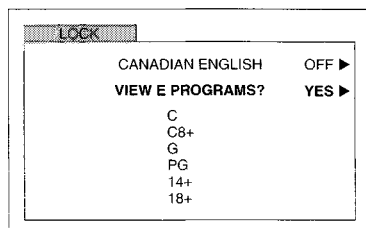
The V-CHIP used in this TV model allows you to block various types of movies and television programs based on the two rating systems used in Canada. PIP will also be blocked automatically.



- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press **CH ▼** to enter the BLOCK PROGRAMS field.
- ☐ Press **◀ VOL** or **VOL ▶** to select CANADIAN ENGLISH.
- ☐ Press **CH ▼** to highlight STATUS.
- ☐ Press **◀ VOL** or **VOL ▶** to display CANADIAN ENGLISH RATING CHART.

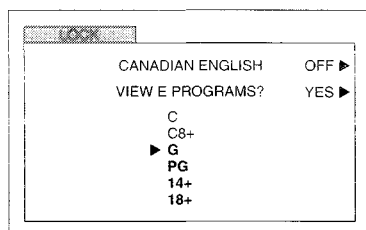


- ☐ Press **VOL ▶** to select CANADIAN ENGLISH ON or OFF.
- ☐ Press **CH ▼** to select VIEW E PROGRAMS?



- ☐ Press **VOL ▶** to select VIEW E PROGRAMS? YES or NO.

Note: E (Exempt) programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



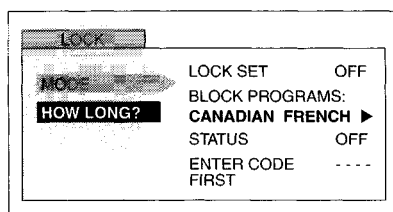
- ☐ Press **CH ▼** or **CH ▲** to move between different ratings.
- ☐ Use **◀ VOL** or **VOL ▶** to select ratings you want to block (RED) and unblock (GREEN).
- ☐ See the CANADIAN ENGLISH RATING CHART.
- ☐ Press **ACTION** twice to return to MODE in Lock menu.
- ☐ Press **CH ▼** to select HOW LONG?
- ☐ Press **◀ VOL** or **VOL ▶** to select 12, 24, 48 hours or ALWAYS.

CANADIAN ENGLISH RATINGS CHART

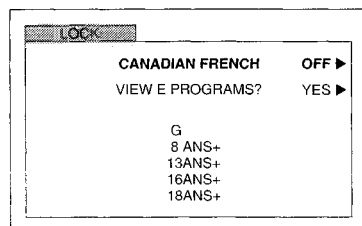
E	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
c	Programming intended for children under age 8. No offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
G	General programming, suitable for all audiences.
PG	Parental Guidance suggested. Some material may not be suitable for children.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
18	ADULTS ONLY

Canadian French

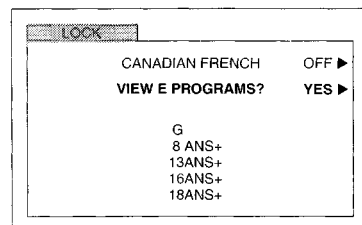
The V-CHIP used in this TV model also lets you block or unblock Canadian French programs according to various ratings categories. PIP will also be blocked automatically.



- ☐ Use the numeric keypad to enter your four digit code. (Use a code that is easy to remember and record it in a safe place.)
- ☐ Press CH ▼ to enter the BLOCK PROGRAMS field.
- ☐ Press ◀ VOL or VOL ▶ to select CANADIAN FRENCH.
- ☐ Press CH ▼ to highlight STATUS.
- ☐ Press ◀ VOL or VOL ▶ to display CANADIAN FRENCH menu rating chart.

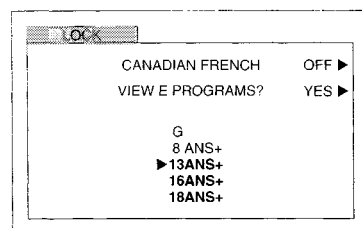


- ☐ Press VOL ▶ to select CANADIAN FRENCH ON or OFF.
- ☐ Press CH ▼ to select VIEW E PROGRAMS?.



- ☐ Press VOL ▶ to select VIEW E PROGRAMS? YES or NO.

Note: E (Exempt) programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



- ☐ Press CH ▼ or CH ▲ to move between different ratings.
- ☐ Use ◀ VOL or VOL ▶ to select ratings you want to block (RED) and unblock (GREEN).

Note: See the CANADIAN FRENCH RATING CHART.

- ACTION**
- ☐ Press ● twice to return to MODE in Lock menu.
 - ☐ Press CH ▼ to select HOW LONG?
 - ☐ Press ◀ VOL or VOL ▶ to select 12, 24, 48 hours or ALWAYS.

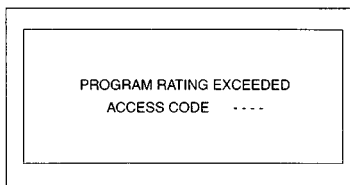
13ANS+, 16ANS+ and 18ANS+ will be blocked

CANADIAN FRENCH RATINGS CHART

E	Exempt - Exempt programming.
G	General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately.
8 ans +	8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended.
13 ans +	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested.
16 ans +	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18 ans +	Programming restricted to adults. Contains constant violence or scenes of extreme violence.

Blocking Message

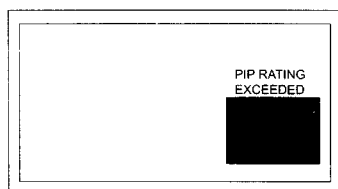
If V-Chip is enabled and the program exceeds the rating limit set by you, the blocking message will appear and the audio will be muted. Enter your four-digit secret code if you wish to continue viewing the program. After entering your code, all locks and rating blocks are disabled until the TV is turned off or until all settings are off.



Note: If you enter your four-digit secret code to override rating blocks, you must reset all rating blocks by either reprogramming or turning the TV off.

PIP Blocking Message

PIP function is available when V-chip feature is activated. If the program being viewed in PIP exceeds the set rating limit, PIP will disappear and a blocking message will appear on screen.

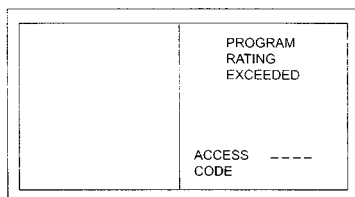


Notes:

- ☐ If the V-chip feature is activated while PIP is on, PIP will immediately disappear.
- ☐ Enable PIP functions by setting LOCK SET and V-CHIP ratings to OFF.

SPLIT Blocking Message

Split is available when V-chip feature is activated. If the program being viewed in SPLIT exceeds the set rating limit, SPLIT will disappear and a blocking message will appear on screen.


















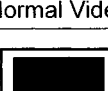

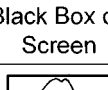


Notes:

- ☐ If the V-CHIP feature is activated while SPLIT is on, SPLIT will immediately disappear.
- ☐ Enable SPLIT by entering the Access Code.

Troubleshooting Chart

Before calling for service, determine the symptoms and follow suggested solutions.

AUDIO	VIDEO	Solutions
 Noisy Audio	 Snowy Video	Adjust Antenna Location and Connection
 Noisy Audio	 Multiple Image	Adjust Antenna Location and Connection Check Antenna Lead-in Wire
 Noisy Audio	 Interference	Move television from Electrical Appliances, Lights, Vehicles and Medical Equipment
 No Audio	 Normal Video	Increase Volume Check Mute Check television SPEAKERS on/off Change Channel
 Noisy Audio	 No Video with Snow	Set TV or Cable Mode Properly Check Antenna Cables
 No Audio	 No Video / No PIP	Check Power Cord is Plugged into Active Outlet Adjust Brightness and Audio Controls Change Channel Check Cable Connections Program the Remote Control Again Check Second Video Source Operation
 Normal Audio	 No Color	Adjust Color Settings Change Channel
 Wrong Audio	 Normal Video	Check Audio Is Set To Stereo or Mono, Not SAP
 Normal Audio	 Black Box on Screen	Change CC (Closed Captioning) from Text Mode
 Normal Audio	 Normal Video	Replace Remote Control Batteries
Intermittent Remote Control Operation		

LIMITED WARRANTY

PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF:
MATSUSHITA ELECTRIC CORPORATION OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF:
MATSUSHITA ELECTRIC OF PUERTO RICO,
INC., Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Color Television Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

TV CATEGORIES	ALL PARTS EXCEPT CRT	CRT	LABOR	SERVICE
31"-36" diagonal	1 (ONE) YEAR	2 (TWO) YEARS	1 (ONE) YEAR	IN-HOME OR CARRY-IN

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in your product or arrange for in-home service (in-home service available only for 22" [diagonal] and larger screen), as applicable, during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-in or In-Home Service

For Carry-In or In-Home Service (as applicable) in the United States call 1-800-211-PANA(7262) or visit Panasonic Web Site: <http://www.panasonic.com>

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

In-Home service, if applicable, requires clear, complete and easy access to the product by the authorized servicer and does not include removal or re-installation of an installed product. It is possible that certain in-home repairs will not be completed in-home, but will require that the product, or parts of the product, be removed for shop diagnosis and/or repair and then returned.

Limited Warranty continued on next page

Limited Warranty continued from previous page**Limited Warranty Limits And Exclusions**

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage, nor does it cover markings or retained images on the picture tube resulting from viewing fixed images (including, among other things, letterbox pictures on standard 4:3 screen TV's, or non-expanded standard 4:3 pictures on wide screen TV's, or onscreen data in a stationary and fixed location). The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the servicer. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE (INCLUDING COST OF AN IN-HOME SERVICE CALL, WHERE APPLICABLE) WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:

1-800-211-PANA (7262), Monday-Friday 9am - 9pm; Saturday-Sunday 9am - 7pm, EST.

Web Site: <http://www.panasonic.com>

You can purchase parts, accessories or locate your nearest servicer by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)

Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032

(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)

(Visa, MasterCard, Discover Card, American Express, Check)

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicer:

Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Phone (787) 750-4300

Fax (787) 768-2910

Index

Numerics

3D Y/C Filter 35, 36

A

AC Power Supply Cord 3

AI Sound 39

Amplifier Connection 8

Antenna 31

Aspect 36

Aspect Button 13

Audio ADJ. 39

Auto Power On 32

Auto Program 31

Auto Set Up Menu 5

B

Balance 39

Bass 39

Battery Installation 14, 22

BBE 39

BBE Button 13

Blocking Message 46

Brightness 35

C

Cabinet and Remote Control 2

Cable / Antenna Connection 3

Cable Box Connection 7

Caption 37

Care and Cleaning 2

Caution 3

Chan Banner 32

Channel Scan All 37

Channel Scan Fav 37

Clock Set 34

Closed Captioning 32

Codes for Cable Box 19, 27

Codes for Cassette Deck 21

Codes for CD 20

Codes for DBS 20, 27

Codes for DVD 19, 27

Codes for Personal Video

Recorders 19

Codes for Receivers 21

Codes For VCR 18, 26

Color 35

Color Matrix 36

Color Temp 35

Component Codes 18, 26

Congratulations 2

Customer Record 2

D

Digital TV - Set-Top Box 10

F

Favorites 37

FCC Caution 0

Feature Chart 4

Freeze 36

Freeze Button 13

Front Control Panel 8, 9

G

Geomagnetic Correction 5, 33

I

Idioma/Langue 31

Important Information 4

Input Label 38

Input Label Chart 38

Installation 3

L

Limited Warranty 48

Lock 40

M

Main Picture Freeze 13

Manual Caption 37

Manual Program 31

Mode 31

Mode Operational Key

Chart 15, 16, 23

Move Button 12

N

Natural Color 35

Normal 35, 39

O

Optional Cable Connections 3

Optional Equipment Connections 6

P

PIC Mode 35

Picture 35

PIP and Split Operation 11

PIP and Split Operation With a
Cable Box 11

PIP Blocking Message 46

PIP MAX 12

PIP MIN 12

PIP Operation 11

PIP, Split and Freeze Mode

Buttons Operational Chart 13

Preset Caption 37

Prog Chan 31

Program Out Connection 10

Programming The Remote 17, 25

Programming With a Code 25

Programming Without A Code 25

R

Remote Control Operation 14, 22

Roller Guide Icon Menu

Operation 31

Roller Guide Icon Menus 30

Roller Guide Icons 30

Roller Guide Menu Navigation 28

S

SAP Button 13

Search Button 12

Sharpness 35

Sleep Timer 34

Speakers 39

Specifications 2

Split Operation 11

Surround 39

T

Tilt Correction 5, 33

Time 34

Timer 34

Timer 1 And Timer 2 34

Tint 35

Treble 39

Troubleshooting Chart 47

TV Or Cable 5

TV/Video Button 12

V

V-CHIP Menu Operation 41

VCR and Cable Box Connection 7

VCR Connection 6

Velocity Modulation 36

Video NR 35

W

With A Code 17

Without A Code 17

**Panasonic Consumer Electronics Company,
Division of Matsushita
Electric Corporation of America**
One Panasonic Way
Secaucus, New Jersey 07094
www.panasonic.com

**Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico Inc. ("PSC")**
Ave. 65 de Infantería, Km 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985
Tel (787) 750-4300
Fax (787) 768-2910

IMPORTANT SAFETY INSTRUCTIONS



WARNING

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.



WARNING: To reduce the risk of electric shock do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.



The lightning flash with arrow head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all the instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
8. Do not install near any heat sources such as radiators, heat registers, stoves, or others apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personal. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



IMPORTANT! IMPORTANT!

Owner Information Card

You will receive these **TWO IMPORTANT BENEFITS** simply by completing and returning this Owner Information Card:

 **PRODUCT SAFETY NOTIFICATION**

 **IMPROVED PRODUCT DEVELOPMENT**

Panasonic

See details inside...

•
**Please send products and other
correspondence to:**

**Customer Service Center
Matsushita Electric Corporation of America
50 Meadowland Parkway
Secaucus, NJ 07094**



**PLACE
FIRST-CLASS
STAMP
HERE**

Panasonic
PANASONIC COMPANY
P O BOX 17509
DENVER CO 80217-0509



THE
Panasonic
CUSTOMER
CARE PLAN

USA ONLY

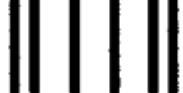
An extended service plan that assures continued top performance of your electronic product after the factory warranty has expired!

*USE THE CONVENIENCE OF OUR
TOLL-FREE CUSTOMER CARE PLAN HOTLINE:*

1-800-637-2007

**RESPOND PROMPTLY AND RECEIVE
AN "EARLY BIRD" DISCOUNT!**

TOMORROW'S SERVICE AT TODAY'S PRICES!


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